

METAL POWER

The Soul Life of the Planets



Alison Davidson

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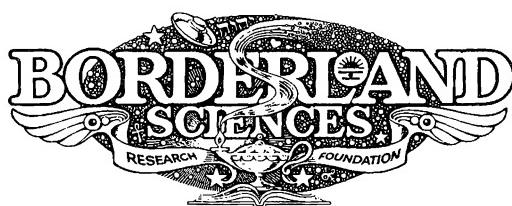
The Soul Life of the Planets

by

Alison Davidson

Edited by

Tom Brown



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ISBN 0-945685-11-4

Library of Congress Catalog Number: 91-076081

Published by:

Borderland Sciences Research Foundation
P.O. Box 429, Garberville, California 95440

*For At-taum
the Mercurial Spirit*

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Introduction

“Genius may be defined as an eminently clear consciousness of things in general...” Schopenhauer

Humanity's evolution is irrevocably intertwined with the discovery and use of the metals. Who could conceive of a world without metals? Visions of the stone age drift through our minds, but that is ancient past for most of the world. With the discovery of metals has come the continual development of civilization. Certainly there may be aboriginal peoples still walking this planet who do not culturally use metals, but the pounding advance of civilization will soon give them metal tools which will be readily put to use. The majority of humanity relies heavily on the metals -- life would be inconceivable without them. But what is the secret power of metals, that they are so essential to our quality of life and evolutionary growth?

A true understanding of the nature of metals cannot come from the modern scientific conception that views substances merely as ordered accumulations of soulless protons, electrons and neutrons. In this book you will come face to face with a new form of knowledge, born of the old, evolving through the present, to synthesize science and spirit for the future. In past stages of consciousness humans were directly in touch with the cosmic forces that penetrated their existence. With the coming of the modern discursive approach to phenomenon this ancient perception has been buried, only to be renewed synergistically with materialistic consciousness by advanced spiritual scientific researchers.

But it all goes much deeper. When humans perceived themselves within a geocentric universe they were able to deal directly with their feelings and emotions -- they were in direct contact with reality. With the evolution of the modern cosmic viewpoint humanity has been set adrift amongst the stars, venerable old life-giver Sol is now just another star amongst billions; nuclear furnaces spewing deadly particles. In the process humans have been cut off from their sense perceptions. They still feel them, but relate to them in a much different way. We see the sun move overhead, but we are taught

from youth that this is a mere illusion, that in reality the earth is moving over 1,000,000 miles per hour in seven different directions at one. (Ignoring the fact that the earth's motion has been calculated, but has never been actually measured!) We are taught that solid objects we see in front of us are not really solid, they are just a set pattern of electrons, protons and neutrons. No wonder humanity as a whole is cut off from nature -- everything we see and sense is explained away by modern science as being a mere appearance.

This is of course the basis of metaphysics, but the modern scientific metaphysics is based on electrical particles created by the experiments themselves, a tautology in action that will only bring curses if pointed out. Rather we should look to the developments in spiritual science such as are spelled out in this book. For when the ancient claim is brought forth that gold is the earthly representative of the Sun, actual experiments are provided to describe this reality which was once readily apparent in past stages of consciousness. If the evidence is examined with the clarity of enlightened consciousness, one will discover that the noble metals of old actually are the earthly representatives of the cosmic spheres described by the orbits of the planets. The positions of the planets have subtle, but definitive and measurable effects on the metals attributed to them in ancient lore. This of course is considered nonsense in the light of modern science, but modern science is now more a religion than science, and dogma prevails over discovery. If such were not the case there would be no purpose for this book.

But we must go even beyond just what can be scientifically described. The imagination must be developed as an organ of the evolving soul. World pictures must be built up in the imagination to allow proper orientation and soul growth. As the seven noble metals of old are attributed to the seven geocentric planets (which include the Sun and Moon), so with the evolution to the heliocentric system and the discovery of the outer planets the imagination must be built up to integrate these new concepts. The attributions herein given to the outer planets and the radioactive metals is a major step for those searching for a more comprehensive cosmology.

But what cosmology can emerge? -- for in many ways this knowledge brings us back to the geocentric universe! The geocentric positions of the planets control the effects of the metals -- this has been established through extensive research. This is tough material to digest, but it is true nonetheless. And yet the heliocentric model explains so much, such as the simple orbits of the planets. The ancient Chaldeans viewed the earth as a flat disc with the hollow hemisphere of the heavens arching overhead. Despite our modern prejudice which would consider such world views as ignorant and scientifically backwards, the Chaldeans could predict heavenly events, such as alignments and eclipses, with the same accuracy as is done with our modern conceptions. So what has really changed, and what will continue to change? The ultimate cosmology will be as far beyond our modern view as that is

beyond the ancient concepts, and it will have to fit all the models at the same time. Forget not that all modern astronomical calculations, in fact all aspects of our lives, are still geocentric -- despite our scientific *beliefs*.

So herein we have the researches of a modern borderland scientist who has dared to test the ancient knowledge while questioning the modern, and finally has taken active steps toward synthesis and understanding of the major forces in our lives. May your universe be enhanced with this knowledge.

Tom Brown
Editor



SILVER

Metal of the Moon

“Every process in nature, rightly observed, wakens in us a new organ of cognition... creating in the wake of an ever-creative nature...”

Goethe

Silver is one of the most precious metals known on Earth. Prized for its strength and lustrous beauty throughout history, silver was regarded as a sacred metal long before it became a measure of commercial transactions.

The ancient moon-worshipping religions treasured this metal, crafting it into rings and other jewelry, ritual ornaments, cups, mirrors, bells, etc., and engraving it for use as talismans. Silver was synonymous with the moon itself, and was believed to be fluidic and impressionable to the human mind and will. Even the form of natural pure silver is organic, preferring plant-like rather than crystalline forms.

According to occult belief the planets each had their own spirit, or supreme angel which ruled over the function of the planet and its sacred metal. The angel ruling over the moon had the power to transmute anything and everything to silver, and the power to rule over water and the tides of the oceans.

Astrologically the connections between the zodiac and the planets are interpreted in relation to the human being, for example, the moon rules the zodiac sign of Cancer, the cardinal water sign -- “The restless tides of the ocean; the surging and ebbing of emotions.” It is a feminine and receptive sign, ruling the womb, the breasts and stomach in the human body. Silver is the metal associated with Cancer.

In alchemy, where the relationship of the elements and metals to the planets is studied, the moon -- or silver -- incarnates the *materia prima*, the pure, unformed, plastic primordial substance, described as being like water. Alchemical silver is passive, mirrorlike and virginal, and according to Titus Burckhardt: “The moon was considered to be analogous to the soul in its state

of pure receptivity; whereas the soul transmuted and illumined by the spirit was analogous to the sun, and the metal gold.”¹

In the Qabalistic tradition the moon is assigned to the sphere of Yesod on the Tree of Life. It is called the “Foundation,” the subtle etheric basis of the material world. This fluidic astral substance is in a continual state of flux, ebbing and flowing with the lunar tides, an invisible ocean of energy permeating the dense physical world in which we live. Knowledge of the lunar phases is extremely important in the work of the occultist, for to work in harmony with the cosmic tides ensures success in the subtle and complex transformation of consciousness — the goal of alchemy and magic.

It is interesting to note that Yesod has a dual quality like the moon itself with its new and full phases. Yesod is assigned the reproductive organs in the human body and the sexual energy which is the driving force behind the phenomenal world. But Yesod is also called the “Pure or Clear Intelligence,” and in occult teachings there is another centre, or *chakra*, of subtle energies ruled by the moon in the cerebellum.

Called Qoph, which means “back of the head,” here where the brain floats in lunar liquid is known to be a powerful ‘reservoir’ of psycho-sexual energies, the true seat of the sexual forces in the human organism.

So we see in the occult tradition this relationship of silver to the moon and the lunar tides very clearly outlined. We have also noted the inherent affinity between the moon and the forces of reproduction in the human body, both in the sexual organs and in the brain itself. But what does science have to say about these subtle occult connections between the planets, the metals and human consciousness? Not very much, if we look towards orthodox science for answers.

The ancient knowledge has been submerged beneath a wave of materialism, and to the one-eyed view of modern scientists these mysterious connections between Cosmos, the sphere of the stars and planets, Earth, the world of matter, and the human organism, are inexplicable and are ridiculed by calling them superstition originating in the mind of primitive humanity.

How far we have come from the ancient spiritual sciences which did not study the dense material world as something separate from spirit, but rather the universe (macrocosm) and the human (microcosm) were considered to correspond to one another as reflections; whatever exists in one, must also in some way be present in the other. Science has cut itself off from the perception of living interacting energy and sees instead a world of dead matter devoid of spirit.

THE SCIENTIFIC CONNECTION — The Kolisko Experiments

Yet earlier this century there were scientists who drew on the earlier occult knowledge and discovered through their experiments that there is in fact, a demonstrable relationship between metals and the planets they were ascribed to by the ancients -- and also that this relationship extends to and

permeates the human being.

Two of these pioneering scientists were Eugen and Lilly Kolisko, who were closely associated with Dr Rudolf Steiner. Through experiments observing the effect of the various phases of the moon on silver salt solutions they were able to demonstrate that there is a definite relationship between the moon, or the moon forces, and the metal silver.

This manifests visually in the appearance of silver, which when melted and then solidified, expels the oxygen absorbed in its liquid state and hardens into formations looking exactly like miniature craters on the moon.

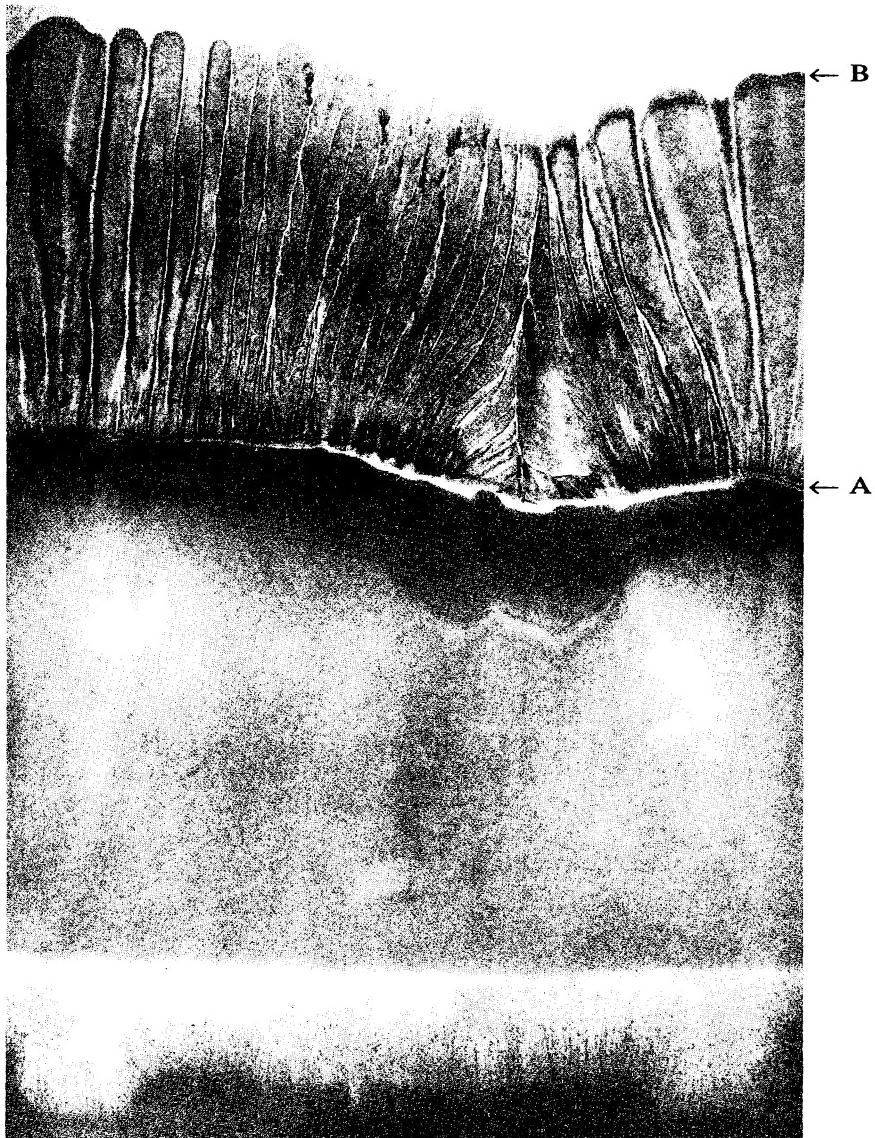
Silver has a strong affinity to light and silver compounds, being extremely sensitive to light, are used for photographic purposes. The Koliskos discovered after years of experimentation that the silver salt solution has the property of being influenced by the moon to produce "pictures" -- each day and night producing another picture, with the full moon and new moon having their specific characteristic expressions.

"The silver acts in such a way that it represents what lives in the light, it produces pictures of what acts in the light. And if we find that this is connected especially with the moon, it may be justified to say: the silver behaves like the moon in the cosmos. The moon itself has the strange quality that it continually reflects the light which comes from the sun and all the other planets. The moon is the great photographer of the universe, it continually brings us back pictures."²

Exposing silver salt solution to the sun during the day and the moon forces at night, a continual metamorphosis of forms revealed itself in a rhythmic way, each month with its own 'signature.' The Koliskos describe this as a "kind of archetypal photograph made by the silver alone... influences which pass through the universe, which we are unable to observe with our eyes, show themselves through such a substance as silver. So we find the silver, as a metal, representing the formative force of the various seasons, the various moon phases."

Rudolf Hauschka, another scientist who studied the work of Steiner, describes the Liesegang ring phenomena -- when a drop of silver nitrate falls on a glass plate coated with chrome gelatin, the silver chromate spreads out in a wave motion, a rhythmic repetition that forms concentric spheres. "Ceaseless repetition and wave-like reproduction of some motion or condition of matter are characteristic of the silver force... There is an outflowing motion with a rhythmical wave impulse, like the spread of a musically vibrating sound. This is another example of the kinship between chemical forces and music; the chemistry of a substance is like an inner music that organizes matter into ordered patterns."³

Silver is like a dense form of moonlight, very like the moon in its brilliance and perfect reflecting power, unrivaled by any other metal. Silver reflects the light shining on it undimmed and almost unchanged; most mirrors today are made by coating glass with a fine layer of silver, so it's not



This photograph, taken June 30, 1927, describes the crystallization patterns of 1% silver nitrate solution. During the day the silver fluid rises on the filter paper to its maximum height (see arrow A). At night the fluid rises above the first boundary to form a second delicate picture of the silver forces, and a second boundary (arrow B). During the time of the eclipse this characteristic feathery pattern of silver was temporarily thrown into chaos, but reestablished itself the following day.

From: *Workings of the Stars in Earthly Substance*, Lilly Kolisko, 1928

surprising that lakes of still water reflecting the moon goddess used to be called Diana's mirror. In fact in the old chemistry, Diana was the name for silver.

Most silver on the planet is found in seawater, although in an attenuated solution, in a ratio of 10 mg. to a cubic metre. Hauschka writes: "It may be that silver acts as a focus for lunar influences, and as a medium for transmitting moon forces and their rhythms to the tides. And just as sea water rises and falls in accordance with the laws of lunar rhythm, so is there a tide of sap in plants."³

Through the Koliskos' and Hauschka's work we find that the moon's sphere of influence is observed to be very much larger than the physical moon itself. The moon's law of rhythm extends to all liquids, from the sea to the rising sap, to the reproductive cycle of humans, particularly evident in woman's menstrual cycle.

SEX, SILVER AND THE MOON

All living organisms are influenced by the moon, the organic liquids are inscribed with the moon's rhythm. Within the human body the processes of reproduction and renewal take place chiefly in the blood, the inner secretions and fluids bear the lunar character and their sphere of influence is distributed over the whole organism.

Just as the silver reaction in the Liesegang rings spreads in concentric circles, "nature brings forth cycle after cycle of budding, germinating life, as species reproduce their kind...These silver forces are active in all growth and body-building processes in the human organism, and most strongly, of course, where physical life is reproduced: in the sexual organs."

But the silver force also works on a higher plane in the brain, where thoughts are reproduced and where the world is mirrored in the conceptual life of the human. Curiously enough it is a silver dye which anatomists use to make the brain substance visible. As the Koliskos point out: "The silver enters the substance of the brain, which is penetrated by fatlike substances, lipoids, it enters the organ to which it belongs. It is the silver which dyes the 'moon organ,' that is, the brain. The brain, which is spiritually the most reproductive organ corresponds to the moon outside."²

The brain itself floats in liquid, and is connected with all the other parts of the body, mirroring in miniature the complex network of subtle energies which permeate the entire organism, and reflecting the spiritual force of reproduction.

The knowledge of this dual quality of the moon was well established in the ancient lunar religions where the Goddess ruled the cycles of the moon and the various vegetative and reproductive processes in the human and in nature. Each day of the moon's cycle was related in a complex science to the secretion of hormones in the body -- especially the body of the priestess.

The rites performed in the light of the full moon celebrated the "forces

of emergent life streaming down to earth.” In Greek mythology for example, the reproductive power of Diana the many-breasted, was invoked to ensure fertility, to give life to form. But Diana, or Artemis, was also a virgin goddess and in this aspect rather than being physically fertile, her power of creativity is psychic and spiritual and is intensified at the phase of the new moon.

So we see the lower physical function of reproduction as a reflection of the creative process which gives birth to a higher spiritual consciousness. The virgin goddess is the silver mirror reflecting the spiritual light into the physical. The goddess is both the giver of sexual love and reproduction, as well as inspiration and divine inebriation. Her rites were ecstatic and their inner function served to arouse the enormously powerful Kundalini energy which lies coiled like a snake in the sexual centre of Yesod.

Instead of being earthed in physical reproduction, the power of the “Fire Snake” is controlled and consciously directed to rise “like lightning” through the *sushumna*, the hollow tube of the spinal column, to reach its height in the lunar sphere of the head -- the Qoph centre.

It is interesting to note here that the descriptions of Kundalini rising show a remarkable affinity with the properties of silver. It is the best conductor of heat -- physical heat being one of the most obvious expressions of the Fire Snake’s arousal. Scientist Wilhelm Pelikan writes: “Silver yields most freely to the passage of heat, retaining little for itself. Heat expands into space fastest by way of silver... heat imparted to any portion of a silver mass is immediately spread through the rest of it.”⁴

Also the lightning passage of the serpent power is described as ‘electrical,’ and silver is the best conductor of electric current. “The condition of electric tension, which is the prime phenomenon in electricity, is readily equalized through a silver wire... Silver does not need to be cooled in order to conduct well.”⁴

There is another quality of silver perhaps worth mentioning here, and that is the pure sound of its ring, which is why flutes and bells crafted from silver have an especially pure and clear sound. The passage of Kundalini also manifests in the sound of extraordinary clear bell-like ringing in the head, although subjectively heard.

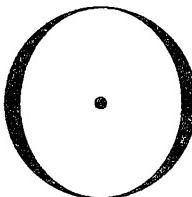
As the serpent power rises it induces a form of inebriation as the *amrit*, or ambrosia of the gods is distilled in the lunar region. This ambrosia/soma, or lunar juice, is charged with the secretions from the endocrine system stimulated by the ascent of Kundalini, and bestows wonderful healing and consciousness altering properties. As occultist Kenneth Grant notes, the priestesses of the moon goddess had “a special affinity with the moon and with the essences contained in the lunar radiations of the female.” The monthly flow of blood corresponds to the full moon of the goddess, the time when her power is at its height, when a door opens between the physical and spiritual realms allowing the human to be touched by the divine.

The lunar-silver quality inherent in all liquids as described before,

transmits the creative life-giving forces. Thus water was kept on the sacred altars of the moon. "Water, the mystical fluid of life, symbolised blood, not arterial blood...but menstrual blood: the primal menstruum of manifestation whereby spirit is made flesh."

So we come full circle from the cosmic view of the ancients, through the physical experiments of modern scientists, to return again in ever expanding spheres to spirit -- reflected into eternity.

"Thus silver takes its place in the cosmic context so that we can call it, with full justification, the metal of the moon. But now we call it this out of our modern consciousness, without leaning on any old atavistic stages of consciousness which, in their dreamlike clairvoyance, saw these connections directly."⁴



GOLD

The Metal of the Sun

*"All the metals are wonderful strangers on earth,
but gold most of all."* Wilhelm Pelikan

Gold is the royal metal, sacred from ancient times, a special substance favoured by the gods. A metal too soft for most practical uses and difficult to mine, especially for our ancient ancestors, gold was nonetheless eagerly sought after for religious purposes where it was created into the implements and shining images of the gods.

Gold was, above all, sacred to the solar deities. It was believed to be the spirit of the sun manifested on earth, and was kept in trust by the priesthood of the sun temples. Through their magical rituals and ceremonials they mediated between the gods, or cosmic principles, and the lives of the people on earth, maintaining the balance and harmony of nature. Gold, over all other metals symbolized this universal harmony, and this symbol is still found in the form of the sun-circle given in marriage ceremonies today, long after its deeper significance has been forgotten.

Gold is no less precious to us today, although its value is regarded more in terms of material rather than spiritual wealth. The first coins used for currency were decorated with pictures of the gods, until Alexander the Great began the ruler's trend of stamping gold coins with his own image. When England introduced the monetary gold standard in 1816 this precious metal was finally stripped of any remaining divine attributes and became instead an anonymous instrument of economic power.

Fort Knox, a North American fortress, is said to hold the largest pile of gold in history, no longer kept for its beauty or its heavenly connections, but hidden in some heavily guarded vault -- an abstract symbol in the heads of international bankers.

How far we have come from the ancient way of perceiving the world and the subtle energies which connect us with the earth beneath our feet and

the stars above. Modern scientists prefer to ignore, or perhaps are afraid to explore these occult (or hidden) connections, instead emphasizing our separateness from the world ‘out there’ and its infinite realms of life, the realms of the minerals, the plants and animals, the planets and stars. Although science derides these connections, we are expected to believe in their equally occult theories, especially in the existence of such esoteric particles as ‘quarks.’

However, not all scientists have turned their backs on the knowledge of the past. Earlier this century there were those who found rich fields for their explorations in such ancient traditions as alchemy and astrology. Eugen and Lilly Kolisko were among these open minded scientists, and demonstrated through their experiments carried out over a period of decades, the undoubted relationships existing between the metals and the planets to which they were ascribed by the ancients. In the first chapter I described the experiments of Lilly Kolisko involving the influence of lunar forces on the metal silver. She also carried out similar experiments with gold, to be described after we first examine what else the old sciences had to say about the properties of gold and of the sun.

GOLD – THE “CONGEALED LIGHT” OF THE ALCHEMIST

Alchemy, with its origins deeply rooted in Egypt-- which incidentally had the most gold in antiquity--has been described as “the science of nature in its broadest sense, relating to the outward realm of metals and the inward realm of the soul.”

The alchemical operation, dealing with the outer processes of transmuting ‘base’ metals into gold, imaged the inner processes of spiritual transformation. Gold was called the sun, the ‘earthy sun,’ and ‘incarnated light.’ The same essential quality was recognized both in the metal and in the heavenly sphere.

This is clearly shown in the alchemist’s table of law passed down through the centuries, the text known as ‘The Emerald Tablet’ of Hermes Trismegistus, the original Egyptian god Tehuti, who calls alchemy ‘the operation of the Sun.’

Stanislas Klossowski de Rola describes it in this way: “Gold, because of its incorruptible nature and its remarkable physical characteristics, is to alchemists the Sun of matter, an analogy to the ultimate perfection which they themselves seek to attain by helping ‘base’ metals to reach the blessed state of gold.”¹

Gold is indeed incorruptible and because of its purity was regarded as the symbol of the spirit... ‘the mass, density and divisibility of bodies have in it been transmuted into pure symbolical quality.’ Where the properties of other metals are destroyed through weathering, rust and other earthly processes, gold remains stable and unaffected; Wilhelm Pelikan writes that it does not lose its cosmic aspect. It possesses an ‘inward equilibrium of

forces,'² making it hard to dissolve or combine with other metals. To change it into a salt a powerful mixture of nitric and hydrochloric acids must be used.

Like the all embracing rays of the sun, gold is present everywhere in minute quantities -- in the atmosphere, in seawater, granite, basalt and diabase. It infuses the earth-sphere with its homeopathic qualities.

The main properties of gold include the three principles of light, elastic fluidity and weight. Gold shines with the brightness of the sun and yet it is heavy, it has a hidden depth of power shown in its high atomic weight and density, being 19 times heavier than water.

The light quality of gold is demonstrated in its affinity with silica 'connected everywhere in nature with certain qualities of light.' It enjoys the company of clear rock crystal, forming veins of pure gold quartz ore.

On the other hand, its 'inner heaviness' is found in the 'pyrite veins of crystalline primeval rocks penetrating deeply into the earth, more deeply than most other metals.' This heaviness is described alchemically as 'the leaden chaos of Saturn where the life of the sun and of gold is hidden.'

Rich deposits of gold are found in all continents over the planet, especially in Africa, the continent of the sun, described by Pelikan as 'the center of gravity for gold in the earth.' Gold is often found in deserts where the power of the sun is experienced in its greatest intensity, and in the old lands of geologic history, such as South Africa, Australia, India, Canada and Scandanavia, and the mountains of North and South America.

In gold we see the brilliance of the sun, but other rich colours are also seen in its colloidal solutions, ranging from greenish-blue, through reddish, violet-blue to pure rose -- from the gold of a noonday sun to the radiant colours of sunset.

The infinite extension and purity of the solar rays are also evidenced in gold, the most ductile and malleable substance known. Gold can be stretched to an amazing degree without losing its cohesion -- one ounce of this metal can be stretched into a wire almost 35 miles long. Or it can be beaten into the translucency of the finest leaf.

THE 'OCCULT' GOLD

Not only in alchemy but in other occult traditions we find similar correlations between gold and the sun.

In the Qabala, the sphere of the Sun is called Tiphareth, also described as 'Beauty.' This is the center of the Tree of Life, balancing all the other spheres, or sephiroth, which it connects. Tiphareth integrates all of the forces of the universal Tree leading towards synthesis and unity. As the inner light of spiritual consciousness it is called the Mediating Intelligence, bestowing the vision of the harmony of all the forces of nature.

The colours assigned to Tiphareth are golden amber, rich salmon-pink, yellow and rose. The part of the body it rules is the heart. All sun-gods belong here, and symbolic animals such as the phoenix -- the Bennu sun-bird

of the Egyptians -- and the lion, the creative symbol of the midsummer sun, the lion of the gold-continent Africa. Astrologically the sun rules Leo, the zodiac sign of the lion.

The spiritual power and generative energy of the sun are evident in the solar deities of all traditions. The Egyptian god Heru ruled over 'the entire compass of the great circuit of the sun,' and was the golden Right Eye of Ra, the solar power worshipped both in Egypt and Polynesia. In the Hindu religious writings the sun was Surya; in classical mythology the sun-gods included Apollo, Helios and Sol, the Babylonian Shamash, and the Persian Mithras. Among the African pantheon Legba is invoked as the Sun-Lord of the Cross-roads.

Columns in honour of the sun were erected in Peru as in other lands where sun worship prevailed, and during the equinoxes and solstices golden thrones were placed upon them to form a seat for the sun to rest on. In the Great Temple of Cuzco, the chief object of worship was a great golden disk representing the sun.

There are sun-goddesses too, such as the Egyptian Hathor 'the House of Heru,' the great cat Bast, and the lion-goddess Sekmet who incarnated the creative power of the sun at its height. She transmitted this power to her consort Ptah who was powerless to create the eggs of the world and heavens without her. Likewise, the sun-goddess Amaterasu was the supreme deity in the Shinto religion of Japan, and was incarnated on earth in the body of the emperor. Many other female and male deities share these solar attributes, emphasizing the balance and harmony inherent in the sun's nature.

THE HEALING GOLD

Because of the sun's affinity with gold, the solar deities and spirits were often invoked for wealth, such as the Qabalistic spirit Och who presided over solar matters. He was famous for his wisdom, and could change anything into gold. He also perfected the science of medicine, another quality of the solar deities who were often invoked for their aid in healing the body and mind of the sick.

In the old knowledge the sun was analogous to the heart, and curiously most of the gold found in the human body lies in this organ. The ancient sun-worshippers of Peru and Mexico conceived of the solar sphere as the source of all vital life, and they returned this gift of life to the sun by sacrificing animal and human hearts, symbolic of the earthly seat of life.

Alchemically, the heart was considered 'the organ of intuitive, unitive knowledge, which completely transcends all other faculties of the soul. Just as the sun gives the planets their light, so the light of the heart (seat of the spirit or intellect) illuminates all other faculties of the soul.'³

In the living creature the heart is the centre of the circulatory system in the body, and Pelikan describes its function as combining and regulating the polaric tension between the light forces of breath and air and the heaviness

of the forces of matter.

"Under the influence of gold the blood forces swing strongly back and forth between the sense-nerve and breathing organization and the limb-metabolic system."

If there is too much gold in the system it becomes a 'poison for body and soul.' At the level of society this pathology is seen in the lust and greed for gold and the untold blood and human life spilled in the mad gold rushes. In the organism, an excess of gold primarily attacks the circulation of the blood and the heart, and produces mental states of hopelessness and despondency with a great desire to commit suicide. The creative energy of the sun becomes instead intensely self-destructive. Homeopathic preparations of gold in minute quantities can be used to remedy this dangerous imbalance.

As the heart is the centre of the circulatory system in the body, so the sun is the centre in the greater body of our solar system. Georg Blattmann in his contemporary study on the sun,⁴ describes our planetary system in terms of a great vortex in its law of movement, with the outer planets circling more slowly on their orbits, while the movement of the inner planets increases in velocity towards the centre.

In the rapid spinning of a vortex a hollow funnel is seen to form boring its way down to the bottom, and in Blattman's concept of the planetary system as a huge cosmic whirlpool, this suction tube in the middle corresponds to the hollow space in the sun's centre.

A hollow sun indeed! This is surely a radical departure from conventional scientific theory which describes the sun as a monstrous thermonuclear reactor spewing out deadly radiation; a projection of their own death culture upon the supreme symbol of life.

But, for the alchemists, the heart *is* the inner sun; the heart *is* hollow, and as I understand, it is the only muscle in the body which stays continuously hollow. Like the sun it is the only bodily organ which is self-sustaining, and with its motions of contraction and expansion it images the cosmic rhythm of the Winter and Summer Solstices. "One heart beat represents the same interplay of forces as there is to be found in a solar year."⁵

In the structure of the heart we also find a spiral pattern. The muscular fibres of the ventricles form what is called the *vortex* as the fibres turn suddenly into the interior in a 'peculiar spiral manner.'

Following this spiral path into the centre of the heart, the alchemist of old found the gold of the inner Sun to be one with the solar sphere in the heavens -- an immeasurable ocean of light pulsating with vast tides and rhythms, as Blattmann describes it, reaching out from the centre to the furthest member of the solar system.

"Incessantly as breathing or heartbeat, the living rhythm of our mother star takes place."

THE KOLISKO EXPERIMENTS

"Science must again become a holy art, if an unholly natural science is not to lead mankind to destruction."

Lilly Kolisko

After exploring these noble qualities of gold and the sun, it's time to return to the hard world of science and the experiments of Lilly Kolisko. Stimulated by the insights of Rudolph Steiner, she began a series of experiments to demonstrate the workings of the stars and planets in earthly substances. These experiments ranged from the 1920s through the 1940s in the main, but were carried on into the 1960s. They consisted of the crystallization of solutions of metallic salts on filter paper. Each experiment, with the solution rising *contra gravity*, produces a characteristic 'signature' of the various metals modified by the current planetary conditions.

I have chosen two of her experiments here, carried out during solar eclipses, to illustrate how the influence of the sun is mirrored in the metallic salts of gold in particular, and silver.

In the case of gold, Lilly Kolisko used a solution of gold chloride poured into a glass vessel with a strip of filter paper inserted; for silver, the solution was silver nitrate.

She writes: "In the case of the pictures of silver we find that the wealth of *forms* is so great that it is impossible to present one picture only of silver... In the case of gold, the *colours* are so rich that many pictures must be observed before we can realise the nature and character of the metal. The colours that make their appearance vary between pure yellow and dark violet." These colours appeared on the filter paper even in a dark chamber, proving that light had no direct influence upon their manifestation.

These twin qualities of silver and gold echo the old alchemists who stated that the sun and the moon are two poles of existence, with the sun as the source of light and the moon as the surface that reflects it. The *form* of the moon or silver changes, like a mirror it is colourless and reflective, and is symbolic of the soul; while gold unites in itself all 'metallic light' and *colour* and remains the same, and symbolizes the circle of the spirit.

During a solar eclipse on June 29th, 1927, with these two heavenly bodies united, Lilly carried out experiments before, during and after the darkening of the sun. She describes them as follows:

"On June 27th we have a normal picture of gold, whereas on June 28th it has become somewhat cloudy. Various specks and strokes have made their appearance and the picture looks almost dirty... The picture obtained at the time of the eclipse manifests the above-mentioned phenomenon still more strongly. A large number of specks have appeared. The colours are not so luminous as on other occasions; their tones are mostly brownish-red dirty violet. It is altogether an unpleasing picture.

"On June 29th at 5:19 p.m. the picture of the gold has become quite clean again; the colours are more luminous but they have not yet assumed their natural, inherent beauty and purity."⁶

During the later solar eclipse on 20th May, 1947, Lilly carried out further research at Greenwich when the path of the eclipse was elsewhere on the planet, and found that each eclipse produced specific effects reflected vividly on the filter paper no matter where the physical sun was at the time.

In a book published on these experiments she wrote: "It means that we must look upon the sun not only as a heavenly body streaming down light and warmth to the earth from one particular spot, but surrounding, enveloping the whole globe with its sphere. When something spectacular happens, such as a total eclipse, certainly we see it happen at a definite place, observing the moon covering the sun, but the whole sunsphere is affected, and the whole earth participates in it."⁷

She found the same phenomenon occurring this time, with the gold pictures turning a dirty purple-brownish interspersed with dark spots. The colour scheme was also reversed, and it looked as if the picture was burnt into the filter paper, as though from an excess of sunlight. After the eclipse had passed the gold chloride regained its power to rise and there was a definite return to the normal appearance. But some disfiguring spots showed the after effects of the eclipse still lingering.

Further experiments were carried out to study the behaviour of gold in relation to other metallic salts during the time of the eclipse. It was discovered that the relation of gold to lead was the least disturbed, but in the solution of silver and gold, the lunar influences completely eclipsed the sun-yellow sediment, leaving a washed-out grayish violet colour which turned to black.

Just as living beings are in some way affected by the sun's eclipse, so are these other 'dead' substances changed in their inner texture. As the sun's strength waned, so did the working of gold appear to weaken on earth. In olden times it was common among native people all over the world to kindle fires during solar eclipses, or shoot burning arrows towards the sun to help return its light and strength. Fires were also lit on other significant days to celebrate the tides of the changing seasons, such as the solstices and equinoxes.

Lilly chose certain of these festivals for further experimentation, and again found gold expressing the sun's influence -- truly the 'earthy sun' of the alchemists. The pictures formed by gold salts were very beautiful in the spring, especially at the exact time of the Spring Equinox. But the most striking appeared on the day fixed by the Astronomer Royal as Easter Sunday -- the first Sun-day after full moon after the Spring Equinox. This day continues a long pagan tradition of celebrating the emergence of life from the darkness of winter, with its symbolic egg from which the sun was said to be born.

Concerning this picture she wrote: "Never, in all the years of experimenting with gold and copper, has a similar picture been formed. It stands there unique in its beauty of colour and strangeness of form."⁸

Strangely enough, the day judged Easter Sunday by the church authorities, produced pictures which were judged as a whole, to be more or less insignificant.

To conclude this circular path which the sun has taken us, we return to those old temples of the sun-gods and goddesses. Who were the spirits of the sun our forbears worshipped? What were they really doing in those golden temples?

We have barely touched upon the outskirts of the mysteries of the Sun, and the role of gold as its earthly ambassador. The inner mysteries remain hidden in those gleaming ritual ornaments and objects of gold used in the temples of the ancient gods. We know that in a very direct way they linked the priest and priestess in a circuit with the essence of the sun itself.

We also know gold to be an excellent conductor of electricity, and, as we have seen, of forces yet to be understood; the forces which the ancient sun-gods personified. Perhaps, as John Keel writes in *THE COSMIC QUESTION*: “If the ancient gods were real in some sense, they may have come from a space-time continuum so different from ours that their atomic structure was different. They could walk through walls because their atoms were able to pass through the atoms of stone. Gold was one of the few earthly substances dense enough for them to handle. If they sat in a wooden chair, they would sink through it. They *needed* gold furniture during their visits.”



QUICKSILVER

Mercury's Liquid Metal

"The world of nature consists of many forms which are reflected in a single mirror -- nay, rather, it is a single form reflected in many mirrors."

Muhyi 'd-Din ibn 'Arabi

There are those who believe that millions, or billions, of years ago when the earth was new and young, all of the metals were liquid and flowed in veins through the body of earth. Over inconceivably vast aeons of time, as the planet aged, a process of hardening and solidification took place which transformed the substance of the earth. The metals became rigid and solid, they no longer flowed with liquid life. All, that is, except one -- Quicksilver, which evaded the hardening process, and was called Mercury after the swift-footed messenger of the gods who remained eternally young.

Mercury is one of the strangest substances on earth, and holds a special place among the ranks of the metals. Although twice as dense as iron, 14 times heavier than water, and with one of the highest atomic weights, it remains a liquid under normal temperatures.

Like the noble metal silver, it gleams when it flows in a metallic stream; it is the water of the metallic world, moistening and dissolving metals the way water dissolves salts. On account of these properties it gained its chemical name *hydrargyrum* (Hg) from the Graeco-Latin words for *water* and *silver*.

I remember being fascinated by this metal back at high school. We used to 'borrow' the mercury from thermometers in the laboratory and play with it for entertainment during boring science classes (that was before learning of its toxic properties!) If you've ever handled mercury you will remember its mysterious fluid weight and great power of cohesion. If the liquid mass is dropped it instantly shatters into countless droplets, each forming a perfect sphere. But just as rapidly these drops join and are absorbed back into the whole again, leaving no visible trace on the surface where it was dropped. Quicksilver is an apt name to describe the mobility of this *Mercurius Vivus* of the ancients.

A NATIVE METAL OF EUROPE

Mercury could be called a European metal as the richest deposits are found in Spain, Italy, Yugoslavia and Russia -- although smaller deposits have been heavily worked in the states of Nevada, California and Texas. Native Americans once used the ore as a pigment, and it also formed the basis of vermillion dye.

The mines in Almaden, Spain, go back to ancient times and once supplied the world's demand for this metal. With the discovery of mercury's ability to dissolve gold and silver, the ancients learned how to leach these precious metals from the ore, the Moors being attributed with discovering mercury amalgams. From Almaden the Romans sent great quantities of mercury ore (cinnabar) to Rome to extract the metal; from Almaden the Spaniards transported hundreds of tons of mercury a year in their sailing ships to the great silver mines of South America. When the richest silver deposits were exhausted they used the mercury to exploit the poorer ores, and no doubt the miners, many of whom must have become ill with mercury poisoning. For a long time mercury was transported in sheepskin bags.

In nature mercury is found in its familiar liquid metallic state, as tiny globules and larger droplets secreted within the matrix rock, or it often occurs in these deposits in its single ore form of cinnabar, or mercury sulphide, which the ancients ground with vinegar to extract the metal.

This beautiful deep red ore, sometimes known as 'quicksilver blende' transforms mercury's heaviness and density into surprisingly light semi-precious crystals. The presence of sulphur reveals a hidden brilliance of colour in mercury that leaves little trace of its metallic nature. This relationship between sulphur and mercury was regarded as one of nature's special processes by early metal workers and alchemists.

CHEMICAL MERCURY – THE “METALLIC WATER”

As 'metallic water' mercury dissolves the soft metals, first by moistening them, then absorbing them to form amalgams. Gold, silver, tin, lead, copper, zinc, cadmium and alkaline metals all succumb to the power of mercury.

However iron, and the iron related family of metals such as nickel and cobalt resist this dissolving power (so does aluminum), and mercury can be stored in iron as well as glass containers. In many respects iron and mercury are completely opposite metals, especially when mercury's extreme mobility is contrasted with iron's intense consolidating power.

Mercury's mobility is evident throughout all its changing forms. Like water it is easily transformed from liquid into gas, or into a frozen solid state. It can lose its form in solution or acquire a new crystalline form, or changing its state, it becomes a new substance filled with colour. Because of this tremendous capacity for transformation, mercury symbolized more clearly than any other substance the one *materia prima* of the alchemists -- the primal

cosmic substance which is capable of taking on all possible forms and states.

Mercury is the most volatile of the metals, boiling and vaporizing into gas at only 359° C, and freezing at only -39° C, after which it solidifies to form a silvery-white, very malleable and ductile mass, soft and easily cut.

While a poor conductor of electricity and heat in its liquid state -- "It is only externally lively, not having yet achieved the inner mobility of conductivity"¹ -- when frozen into a solid, mercury becomes a good conductor and takes its place in the table of metals between gold and copper.

Although a poor conductor, liquid mercury is extremely sensitive to heat, contracting and expanding exactly with the rise and fall of the outside temperature, giving us its most familiar use in thermometers. It is also used in barometers, vacuum pumps and electric switches.

As a liquid metal mercury has a special affinity with the forces involved in chemical reactions, those forces which "appear and work primarily in the liquid realm." It is an important catalyst, beginning and speeding up certain chemical combinations and is described as "uniting and harmonizing the chemical polarities."²

On every level it is Mercury's nature to associate, to bring together other metals and chemicals, eager to form alloys and amalgams. We are all familiar with amalgam dental fillings (containing over 50% mercury!) used in allopathic dentistry since the 1800s. Only now is the dangerous toxicity of these mercury amalgams coming into public awareness. Hopefully we will soon follow the lead of the more enlightened Swedish authorities who will ban the use of all mercury in amalgam fillings by 1991.³

This power to combine diverse substances has also led to the use of Mercury in explosives, where it holds a tense balance between highly explosive elements. An example is mercury combined with nitric acid and alcohol to form mercuric fulminate, a highly unstable explosive and an essential element in detonating dynamite. The brilliant explosives expert Jack Parsons, a member of our early space program and also a well known occultist, was killed by an explosion of mercury fulminate. (Curiously, Mercury is said to rule over both travel and magical operations).

Just as easily as mercury combines with other elements, so is it freed from these combinations. It dissolves and amalgamates, catalyses and separates with equal ease. It is the *solve et coagula*, the basis and key symbol of the alchemical work.

The chemical activity of mercury is not limited to its liquid state, even the light of a mercury arc lamp has a strong chemical effect, radiating its metallic properties in vapor-light form. Wilhelm Pelikan mentions that ergosterol when irradiated with this light, can be transformed into a substance resembling Vitamin D. Whereas the ore of mercury is a deep warm red, mercury vapor gives off a cold, intense green-blue light giving the flesh a corpse-like pallor. This light, high in violet and ultra-violet rays, is reminiscent of the light in high mountains and is used in artificial 'alpine sun'

lamps.

Returning for a moment to the contrasting properties of iron and mercury, we find that while iron oxidizes easily and rusts in contact with air, mercury remains unaffected. But a relationship between mercury and oxygen is formed when the metal is heated almost to boiling point, where it sucks in the oxygen to form a yellowish-red oxide. On further heating mercury expels this oxygen and is said to breathe "like a small metallic lung." It was this curious breathing action which led to the discovery of oxygen. The oxides form two series of salts, the univalent mercurous salts (Hg_2O) and the bivalent mercuric oxide (HgO).

MERCURIAL FORCES IN THE BODY

"The essential nature of Mercury is to unite."

We can live only because our bodies are able to take in external substances and change or transmute them into nourishment. It is the mercury force which makes this amalgamation of the external and internal possible, and this is most obvious in the breathing and digestive processes.

All living breathing beings share the same outer atmosphere, the same air space, which is brought into each individual through the lungs where oxygen is absorbed into the blood to become a part of the living organism. Rudolf Hauschka writes: "Even the build of the lungs is mercurial. They are like little trees made of tiny hollow drops. Innumerable spherical spaces thus form a common breathing surface."

This union of the outer with the inner to nourish and regenerate the body is also evident in the digestive system where food is taken in from the outside to be dissolved by the digestive secretions and absorbed through the intestinal walls into the streams of lymph and blood.

Following this process deeper into the metabolic system we find the forces of mercury ruling even over the cellular life, keeping a state of order and balance between the organism as a whole and its individual cells. When this equilibrium is disturbed the cellular order breaks down and individual cells assume an anarchistic life of their own, proliferating out of control and in extreme cases destroying the system itself.

Here the value of mercury as a medicinal remedy excels, working to stop the independent action of cells which have detached themselves, rounding up the separatist 'guerrilla units' and reabsorbing them into the body as a whole.

MERCURY AS 'A REMEDY FOR ALL ILLS'

At the turn of the century the British Pharmacopeia contained some 25 mercurial preparations including pills and powerfully antiseptic ointments, and up until recently you could still buy mercurial antiseptics over the counter. This antibacterial quality of mercury is today exploited, for example, in anti-fungus baths for seeds, a practice responsible for major

outbreaks of mercury poisoning in Iraq, where hundreds have died from eating seed grain treated with methyl mercury fungicide.

Mercury was once even administered pure and the old medicinals describe as much as a pound of pure mercury given in cases of intestinal obstruction, hoping to relieve the problem by its sheer weight!

But mercury was most valuable as a remedy against syphilis, that scourge of the 13th century up until recent history, (and including the connection of syphilis with AIDS). The only problem was that mercury, being so highly toxic, cured the disease but tended to poison the patient!

Even the smallest traces of mercury can cause dangerous effects. In the Middle Ages mirrors were commonly made by coating glass with a mercury-tin amalgam, and objects were gilded with a combination of mercury and gold. In these industries, and in the mercury mines, poisoning was an occupational hazard with the metal being absorbed so easily through the skin or lungs of the workers.

Like arsenic and digitalis, mercury is a cumulative drug and once it has been absorbed by organic tissue it is held fast there and only with great difficulty escapes to be excreted from the system. It causes damage to the brain and nervous system, overstimulates the glandular system which produces hormones, and suppresses the entire immune system.

But despite being such an insidious poison, the use of mercury in homeopathic form is a highly effective and invaluable remedy for many problems. It is one of the prime remedies for syphilis and AIDS, for the whole progression of symptoms, in combination with other remedies including certain snake venoms (a connection with the serpents of Mercury's caduceus). It is sympathetic to the lymphatic and central nervous system and works towards restoring the marrow of the spinal bone.

THE ALCHEMICAL 'MERCURY OF THE WISE'

The Tantrik alchemists described mercury as "the most fundamental, and indeed the quintessence, of all substances." They were well aware of its medicinal properties and believed it to possess life-prolonging properties. It was so highly valued as a restorative and stimulant, that mercury was the main ingredient in most Tantrik medicinal preparations.

Marco Polo, on his travels through India commented: "Those people make use of a very strange beverage, for they make a potion of sulphur and quicksilver mixed together and this they drink twice a month. They say this gives them long life, and it is a potion they are used to take from their early childhood."⁴

Even today we are told that some Tantrikas take mercury in place of food to preserve the vital elixir of life, believing that "only when the body is perfectly attuned and strengthened can it experience and sustain the full intensity of the cosmic state."⁴

Among the ancient Tantrik treatises are descriptions of their sophisti-

cated chemical laboratories, and details of the medicinal and alchemical mixtures they prepared. But these preparations were more than just a mechanical mixture of material substances following some ancient alchemical recipe. Alongside the combination of chemicals was a body of closely guarded secret processes that transmuted the raw mercury into the life-giving elixir. An understanding of the processes of spiritual transformation went hand in hand with the knowledge of chemical transmutation. The two could not be separated.

In the Tantrik alchemical writings mercury is referred to as *rasa*, which is not merely the metallic substance but the subtle essence of substance itself. *Rasasara*, or the ‘sea of mercury’ refers to the cosmic sea from which the primeval form of all things emerged.

This Tantrik concept of “an original stuff, or ultimate substance, out of which the whole universe has been formed” is identical with the *materia prima* of western alchemy mentioned earlier, with mercury as its symbol “...seen as the fine psychic stuff, or vital breath, which unites the individual body-soul organism with the cosmic sea of life.”¹

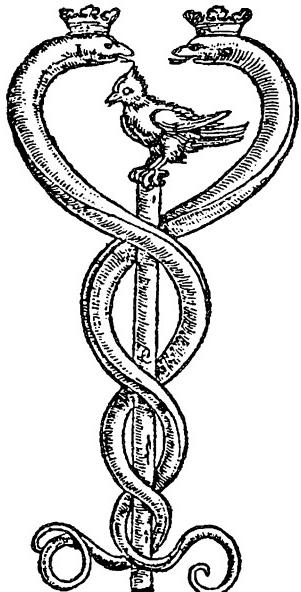
Rather than just dismissing these old alchemical beliefs, some modern researchers have continued to incorporate this knowledge into their observations and understanding of nature. Pelikan, for example, relates the three basic alchemical principles of Mercury, Sulphur and Salt to three processes in the mineral kingdom. He describes Salt as being “the ponderable matter, subject to the earth forces,” and Sulphur “as the substance saturated with the imponderables, the forces raying in from the world circumference.” Mercury, however, he describes as “a substance open to the rhythmic interplay of forces from both sources, one radiating out from the earth and the other radiating in from the cosmos.”²

THE CADUCEUS OF HERMES

Mercury is the agent of all possibilities, and its great desire to unite, dissolve and transform makes it the ‘first agent’ of the alchemical operation. Its moist receptive nature was likened to the original female power which like water, or the passive *materia*, takes on all forms without being altered itself. “In it the germ of spiritual gold lies hidden, as does gold in ordinary quicksilver.”³

Its opposing force is the volatile solar Sulphur, with its hot, dry nature. Together they represent the active and passive poles of nature, the double spiral, or the twin serpents or dragons coiled opposite about the wand of Mercury. At their height these two opposing generative forces unite in the alchemical marriage of the Sun and Moon, King and Queen, male and female, and from their perfect union is born the alchemical gold.

They are the Yin-Yang of Taoism, also identical to the *Ida* and *Pingala*, the subtle lunar and solar currents of Kundalini, described by occultist Kenneth Grant as the “electro-sexual serpents entwined about the Wand of



“...these are the two serpents which are fixed around the caduceus, or Staff of Mercury, and by means of which Mercury wields his great power and transforms as he wills.”

Nicolas Flamel

the Magician, as in the Caduceus of Hermes.”⁶

Certain researches into the mysteries of electricity are focused around what is called a caduceus coil. This coil generally consists of a single wire wound around a central pole in such a way as to resemble the Caduceus of Hermes. Supposedly, when the coil is energized anomalous energy and gravity effects are experienced in the field of the coil. It varies a bit from a true Caduceus in that it consists of a single wire instead of two. Perhaps further experimentation could focus on using two wires of dissimilar metals, such as copper and iron in electrical circuits, or gold and silver in radionic circuits. Actually any two coils wound in opposition could be considered a caduceus coil. Using dissimilar metals, as George Van Tassel proposed to use in his rejuvenation building -- the Integratron, would provide a polarity quite in tune with the energies of mercury.

MERCURY OF THE MIND

Being so liquid, continually changing its form, the deeper meaning of mercury is not easy to define. It is described as ‘the all dissolving water and nourishment for the spiritual embryo’ and a ‘living, omnipresent and innate spirit.’ It is ‘the substance which flows in all psychic and mental forms’ and has the only planetary sign which combines both the Sun and Moon above the cross of the four elements.

This dual nature is reflected in mercury’s alchemical symbol of an androgynous figure, expressing both female and male powers. It is at the same time the ‘semen of Shiva,’ and ‘the maternal blood’ or ‘the mother of gold,’ and there are obscure allusions to the menstrual blood of Tantrik priestesses being potent enough to solidify mercury.

Wherever there are mercurial forces operating there is the circulation of energies, the connection of opposite poles, contact, intercourse and interaction. In the Qabala the power-zone of Mercury is the sphere of the mind, of mental magic where the mind gives form to its creations. It is called the 'Absolute or Perfect Intelligence' and initiation into this sphere gives the ability to see behind appearances, and to realise the subtle invisible forces behind all forms.

Wherever there are boundaries to be crossed Mercury is found -- it is the true ruler of the borderlands. Hermes, the Greek form of Mercury was also known as the 'Lord of the Crossroads' who conducted the souls of the dead into the underworld. The jackal-headed Anubis performed the same function in ancient Egypt and pots of mercury have been found in Egyptian tombs as offerings to this friend and guide of the dead.

In Astrology, Mercury represents the 'active intelligence,' ruling all occupations dealing with communication, education, travel, and writing. The restless intellect of Gemini roams the fields of the mind gathering and disseminating information. The earth sign Virgo, also ruled by this swift moving planet, puts these ideas into form to be of service to humanity.

Trade, commerce and agencies of all kinds are under the patronage of Mercury -- once the entire world trade in mercury was controlled by one family of the Fuggers. In more recent times it was monopolized by the powerfully wealthy Rothschild family. But in its true dual style mercury also patronizes swindlers, thieves and corrupt government officials. We live in a tremendously mercurial age where information is transmitted at mind-dazzling speed via computers and satellites and all their accompanying technology. Never before has such an elaborate system of communications been so open to abuse by 'intelligence' gatherers.

While Mercury makes us want to know, to question and probe beyond the world of appearances, when this force predominates it becomes the coldly rational mind, closing out the higher impulses of inspiration and intuition. This negative side manipulates both information and the forces of nature without conscience, and combined with Mercury's great compulsion to amalgamate works to build giant corporations and vast multinational businesses in which the individual character is dissolved and lost.

Consider the ultimate abuse of the mercurial forces, shades of George Orwell's *1984*, a chillingly prophetic example of the shadow side of Mercury, where the world is dominated by a handful of powerful, invisible dictators with complete control over the communications and intelligence networks, who have perfected the art of manipulating the mass mind of the people, now mere slaves to the political machine, their creativity and will crushed by bureaucracy.

But the essence of Mercury remains forever fluid. Far better it is to contemplate the cheerful Messenger of the Gods who, wand in hand, probes beyond all arbitrary boundaries to discover the Gold of the spirit within.



COPPER

The Substance of Venus

*“The breath of the west wind bore her
Over the sounding sea,
Up from the delicate foam,
To wave-ringed Cyprus, her isle.”*

Thus sang Homer to celebrate the birth of Aphrodite, the goddess of love and beauty. Also known as Ishtar, Astarte and Venus, she was born from the blue-green waves of the Mediterranean clad only in her red-gold hair; her gentle beauty captured exquisitely by the Italian painter Botticelli.

Who has never been touched by the beauty of Venus, watching her rise brilliant as the Morning or Evening Star — turning golden-red as she sets, sinking back into the ocean of her birth? “Beauty of Life” she is called, the essence of woman reflected in the shining warmth of the metal copper.

After the Sun and Moon, Venus is the brightest light in the heavens, but contrary to the rotation of most of the other planets Venus spins in a slow retrograde motion, leading scientists to wonder if it may have flipped completely over sometime in its far distant past.

The island of Cyprus is regarded as the home of both Venus and copper where it has been extensively mined since antiquity. The word copper is derived from the Latin ‘cuprum’ from cyprus, which in turn is said to originate in the Assyrian word for copper, ‘kipar.’ Although copper is soft and malleable, when blended with tin it forms the harder metal bronze.

After gold and silver, copper is the oldest metal known. Copper vessels have been found in Egypt dating back 4900 B.C. and earlier elsewhere. For hundreds of years copper was the main metal used; ancient races such as the Sumerians and Phoenicians made their weapons, helmets and shields of copper. From 3100 B.C. both copper and bronze were in use until the Bronze Age took over around 2100 B.C., preceding the more martial age of iron.

Copper’s veins run extensively through the planet, particularly in the

'alkaline' depths where it has a great affinity for sulphur; Wilhelm Pelikan describes copper and sulphur as "locked together in the earth in primæval times."¹ It is often found where there is volcanic activity, at present the most lucrative copper deposits being found in North and Central and South America, the Soviet Union, Central and South Africa and Australia, with smaller deposits throughout Europe.

Perhaps the oldest and most puzzling copper mines are located here in America, in the Keweenaw Peninsula and on Isle Royale in Lake Superior. Veteran author and researcher Vincent Gaddis explored the mystery of these prehistoric mines which date back to at least 5000 B.C. The extent of this vast mining empire is incredible; there are thousands upon thousands of pits ranging for 120 miles, and it is estimated that two million pounds of copper were mined on Isle Royale alone. As Vince asks, "Who were these archaic miners? How and to where did they transport this metal?"²

ALCHEMY'S "COPPER CAULDRON"

"Truly science drives out the spirit from the whole and proudly displays the separate bits. Dead, all dead." Walter Lang

In this exploration of the Planets and Metals we are seeking in a small way to restore the spirit to the dead world of modern science. For this reason we return to the ancient and sacred science of Alchemy described as 'a total science of energy transformation' -- dealing not only with the transmutation of metals as physical substance (the alchemists really could change lead into gold), but also as symbolic of the inner processes of spiritual transformation.

In alchemical terms we could describe the dead-world view of modern science as the 'black phase' of the alchemical operation, the phase of corruption and decay. Here the divine spark, or the spirit represented by the Sun appears to die, suffocated in the dark chaotic realm of Saturn-lead.

Even the physical substance of gold appears to be affected. After the early 1950s, Lilly Kolisko found in her experiments that the gold chloride solutions continually failed to crystallize into their previous colourful forms. It was as though the sun was eclipsed, somehow sickened, and gold, the sun's element on earth reflected this. This darkening of the sun-gold coincided with the onslaught of atmospheric nuclear testing and greatly increased radio-frequency use.

Alchemists say that putrefaction precedes germination, that "the King Gold must be killed and buried, in order that he may awake again to life, and who, ascending through the seven regimes, attains his full glory."³

These seven regimes are the seven levels of consciousness represented by the Sun, Moon and the five planets visible to the naked eye. Each of these cosmic forces corresponds to a particular metal, and in our investigations we find that the properties of these metals are intimately connected with our own nature.

Alchemically the Sun and Moon (gold and silver) express the duality

of the active and receptive poles of existence. In the other five planets and their corresponding metals, either solar or lunar qualities predominate, but without reaching their full expression.

This is demonstrated in the planetary symbols which are formed from the three basic figures of the circle (sun), the semicircle (moon), and the cross of the four elements: fire, water, air and earth: the four directions of space.

In the symbol for Venus (and copper) the Sun-circle is rising above the cross, showing an infusion of solar power which, in the alchemical operation, corresponds to the inner sun rising but not yet perfected. In Venus the spirit is inspiring matter to more perfect forms of expression; the higher aspirations are tending to predominate over the material desires of the Earth.

The earliest form of Venus was the Egyptian ankh, symbol of universal life; the egg-shaped womb of the goddess, the place where life is generated, surmounting the cross of the elements. This womb from which the sun emerges is represented by the copper cauldron of alchemy. It is interesting to note that the Christian religion removed this womb-egg from the ancient symbol of life, to be left only with the unbalanced cross of matter.

PLANET OF BEAUTY AND LOVE

In Venus there is a desire, a *necessity*, for beauty and harmonious union. Where she rules, there is beauty, song and dance. Instruments and bells are made of brass with the resonance of copper. Egyptian ladies used the copper ore malachite for beautifying their eyes.

The influence of Venus is predominant in the horoscopes of artists, musicians, the creators of beautiful clothes and jewellery. Artists use copper extensively for etching and print making, and in pigments for colourful paints. There are few substances on earth which possess the beauty of this soul metal, the many rich colours of red ranging from rose to almost gold.

In the alchemical operation 'the colours of the peacock's tail' appear, a bird sacred to Venus (and the African goddess of love, Oshun) which owes its beautiful blue-green plumage to the presence of copper. As much as 6% copper has been measured in the wing pigmentation of certain species of birds.

The crystallizations of Lilly Kolisko⁴ using gold chloride and copper sulphate were characterized by their delicate colouration, nearly always creating a border of light green at the top of the copper "pictures."

This brilliance of colour is also displayed in copper's various ores such as malachite, azurite, dioptase, chalcopyrite and bornite, ranging from green and blue through to purple and red. If you ever watch copper burning you will notice the characteristic blue-green flames with flashes of red. The alchemists described Venus wearing a blue cloak over a red spirit, these colours reflected even in Botticelli's painting.

The blue-green waves from which Venus rises illustrate copper's special affinity to water -- even the colour of liquid molten copper is sea-

green. Most copper ores contain water, and the soluble copper salts such as copper sulphate and copper chloride, with their beautiful green and blue crystals, consist of up to 35% water. In fire copper loses its colour and turns black, when exposed to the atmosphere it assumes the green or bluish deposit of copper carbonate known as verdigris. While copper sulphate (blue vitriol) dries into a white powder on contact with air, it rapidly absorbs water to return to its crystallized state.

As Rudolf Hauschka writes "...copper absorbs water and changes it into form and colour. This capacity for organizing fluids is a characteristic copper attribute. Plants perform this function in organic nature...Copper, which has the same tendency in the dead mineral world, is closely bound up with all vegetative processes."⁵

Copper's connection with the fluidic functions is also demonstrated in cold-blooded animals such as snails, mussels, oysters, crabs and squid from the sea, which breathe with the aid of a blood pigment rich in copper known as haemocyanin. (The conch on which Aphrodite rests is a type of mussel.) Mellie Uyldert notes: "These soft, moist animals belong to the sensory element water which is linked with a person's emotional life. It is well known that oysters have an aphrodisiac affect."⁶

Astrologically, Venus (or copper) rules the two signs of Libra and Taurus. Where Libra represents the harmonious balance of the scales, in the sign of Taurus the bull, Venus shows herself as the patroness of skilled agriculture, connected closely with plants and occupations dealing with nature. Interestingly, copper and some of its ores imitate plant forms, veined leaves and tiny trees. Hathor, an Egyptian form of the goddess, shows her connection with the generative forces of the earth in her cow-form (her horns which are still used in bio-dynamic preparations for gardening). She is 'union in beauty' and her name Het-Hert means the 'house of Heru', the Sun.

Edible plants rich in copper include red clover, lettuce, garlic, carrot, cabbage, chickweed, sunflower seeds and walnuts, among others.

Copper's involvement in the circulation of liquids is also shown in the living organism, in the *venous* blood which carries the toxic substances to the excretory organs. Copper is abundant in the female sexual organs, ruled by Venus of course! and, according to Uyldert, copper in the body is used up by sexual activity. She says this is the reason why people with no outlet for these energies often suffer from gallstones, which contain copper. Just as copper imitates plant and tree forms in its natural state, in the human female reproductive organs the inner passage of the cervix appears like branches forming from a tree trunk, and is given the name *arbor vitae*.

In the ancient temples of the goddess her cosmic energies were conveyed by sacred prostitutes who conducted the revitalizing and healing love of Venus, the copper energy, maximizing the 'orgiastic potency' (to use Dr. Reich's term) of the worshippers. For the sake of our good health, at least, we should bring those temples back!

MEDICINAL COPPER

The liver is also rich in copper and liver extracts have been used to treat copper deficiencies. These deficiencies can cause malfunctions of the thyroid, unhealthy circulation (particularly the legs), spasmodic cramps, epilepsy, some mental illnesses, multiple sclerosis (whose sufferers often have been deprived of love and affection, according to Uyldert), and poorly developed sexual characteristics.

I have often used homeopathic copper for children's leg-cramps -- growing pains -- and it is also used for convulsions, deficient kidney action, diabetes, etc.

One of the most famous uses of copper for many centuries was a form of copper vitriol available from apothecaries as the 'powder of sympathy.' The power of this remarkable powder for healing wounds was extolled in *A Discourse Touching the Cure of Wounds by the Powder of Sympathy* written by an English nobleman at the court of Charles I in 1658. Rather than using the powder on the wound itself, a bandage with blood from the wound was placed in a bowl of water containing a handful of dissolved copper vitriol. Its cooling effect was transmitted etherically to the wound, (note copper's high level of conductivity) apparently resulting in a rapid healing.

Another use of copper as a medicine was to rub the affected area with a piece of this metal a specific number of times a day depending on the affliction. For influenza we are told to rub the forehead with copper twice daily.

Copper's use in bracelets to alleviate rheumatism and arthritis is well known; also its disinfectant properties -- it kills algae, fungi and germs. Put a copper coin in your aquarium, or in a vase to keep cut flowers longer. Use brass doorknobs to rid your visitors' hands of unwelcome germs. There are many uses for this wonderful metal!

COPPER'S POWER OF CONDUCTIVITY

After silver, copper is the metal with the highest conductivity for electricity and heat. Copper pots have long been favoured in the kitchen for this reason -- also "...the medieval Dutchman brewed his clover medicine in a copper pan, and the Chinese their poppy-juice, for Venus' energy is transmitted to whatever is being cooked."⁶

Most of the copper produced today involves the use of this metal as a conductor, in heavy industry and the manufacture of very sensitive electronic instruments, in electro-plating, engine building, and heating and cooling technology.

Hauschka makes an interesting connection between this power of conductivity and the angular velocity of the planets. Briefly, the average angular velocity is expressed in the degrees of movement of the planets, calculated over thirty day periods. Hauschka writes: "The resulting figures are surprisingly correlated with those found in physics textbooks on the

	Conductivity for Warmth & Electricity			Angular velocity of the planets in degrees
Lead	8	10	Saturn	2
Tin	15	13	Jupiter	4
Iron	17	20	Mars	18
Gold	53	73	Sun	30
Mercury	(68)2	(76)2	Mercury	36
Copper	74	77	Venus	32
Silver	100	100	Moon	392

Chart from Hauschka describing the relationship between the conductivity of the metals and the angular velocity of the planets related to them. The figures in parentheses are for the conductivity of solidified mercury.

conductivity of metals... The impetus of the planets appears in a metamorphosed way as conductivity.”⁵

Georges Lakhovsky, with his copper coils, was also concerned with conducting and transforming cosmic energies.⁷ His simplest coil consists of copper wire or tubing shaped into a circle with the ends overlapping but not touching. Placed around a plant or tree it enhanced growth, as we found in our own garden, and even removed disease. As far as I can tell Lakhovsky never said why he used copper, but we have already found good reason in our study of copper here. L. E. Eeman also preferred to use copper as a conductive medium for balancing the body’s natural energy in his “relaxation circuits.”⁸

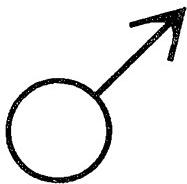
In the field of agriculture, appropriately, Victor Schauberger⁹ also focussed on the metal of Venus. After noticing the detrimental effect of iron ploughs on the soil -- iron dried out the ground by disturbing earth’s magnetic field -- he began using copper instead with the result being a dramatic increase in fertility. The copper helps to retain ground water. He also used fine copper filings to help ‘charge’ his irrigation and compost mixtures, both produced in egg-shaped containers or heaps. Once upon a time, those same copper energies were fixed by ritual copulation in the fields to ensure the fertility of the earth.

In solution copper chloride -- along with other metals -- has been used in the practice of *chromatography*, developed by Ehrenfried Pfeiffer.¹⁰ By studying the colours and shapes crystallized on filter paper, he could determine the cosmic energies operative in various extracts mixed with the solution, e.g. to test the quality of compost heaps.

Blood extracts can be used likewise in copper chloride solution to discover diseases in the blood which have not yet shown any symptoms. “At the same time, certain medicinal herbs are seen to display the same shapes as the blood which is being examined. This shows an essential correspondence between them and the ill person, which itself indicates their suitability as a remedy in the case in question.”¹¹

Another property of copper reflects Venus' dynamic power of attraction; it combines readily with other elements to form alloys and readily transforms other substances into complex salts. It is because of this versatility in transforming and combining, Wilhelm Pelikan tells us, "the alchemists called copper *meretrix metallorum*, the harlot of the metals."

Indeed, everything Venus touches is seduced by her beauty.



THE IRON ROD OF MARS

“Mars is the god that makes the iron grow.” Old saying

Gone is the gleaming golden age, gone are the days of silver and copper ruled by the gentle muse of poetry and art. Now we live in the Age of Iron, and the ruler here is Mars, the fiery god of war and the lusty lover of Venus.

From the earliest crude wood-fuelled cast iron forges to the vast steel mills of South Chicago we have industrialized the planet, creating a technological labyrinth of iron and steel. Without iron there would be no factories (no plastic, no computers), no transport, no communications, war or industry as we know them. Without iron our civilization would totally disintegrate, so dependent we have become upon this humble metal.

Undoubtedly tremendous technological benefits have been brought to the human race, but the cost of man's use and abuse of iron is becoming rapidly apparent; with iron man has constructed weapons to destroy not only whole races of people and animals but also Nature, the mother of all of us. The energies of Mars have come to dominate our society and our daily lives.

Ever since humans first learned to forge iron it was put to the purpose of war. Early Egyptian mythology describes the god Horus subduing the enemies of Ra with spears and chains of iron, and in later Roman times the spears of Mars were kept in the king's house and the god himself was believed to reside in them and was invoked for battle. By the Middle Ages swords of Damascus and Toledo had become famous weapons -- but it was the invention of guns, and other more deadly weapons that changed the nature of war forever.

Although a humble metal, iron wields an unsuspected power that man in trying to harness has instead been enslaved by it. Although we can't easily escape these iron chains which have been forged around us, we can at least learn to understand something of this metal's deeper nature.

THAT UBIQUITOUS METAL

“Iron occupies the center of the stage. It cannot be overlooked or undervalued.”

Wilhelm Pelikan

Iron is present everywhere, all around us and inside our bodies, in the earth, in the atmosphere as meteoric dust, and being largely soluble in its salts it is dissolved in springs and streams to be carried out to the ocean. Of all the metals, iron is the most abundant, forming with its oxides and a great variety of other ores, up to 5% of the earth's crust, but pure iron is rarely found. Instead it combines with other elements to form ores such as magnetite, hematite, chalcopyrite and siderite which contain over 50% iron, with the greatest deposits forming an iron 'belt' or 'girdle' around the temperate northern half of the northern hemisphere. So it is in North America, England, France, Germany and Northern China where most iron ore is mined, with the largest mines located in the USSR. Some iron is also mined in southern latitudes, such as the north of New Zealand where Japanese miners suck tons of black iron sand from the western beaches, hot as a tin roof underfoot in summer.

Other combinations with iron include sulphur as pyrite, found at a great depth in the oldest rocks on the planet, testifying to iron's involvement in extremely ancient earth processes. And with oxygen iron forms the ore magnetite which, as its name suggests, is magnetic, and forms whole mountains in the far north, in Norway, Sweden and the Urals. This affinity with oxygen is a vital part of iron's nature and function, for iron freely takes oxygen into itself and just as freely gives it back out. As ferric oxide, iron is trivalent and rich in oxygen; as ferrous oxide it is bivalent and low in oxygen and forms the characteristic red rust.

This red rust reminds us of the Red Planet, Mars the ancient planet which has been linked in strange ways to our own, and where civilizations older than we can imagine are said to have once flourished but now are red dust; where exists "...the presence of enormous quantities of ferrous iron oxide, hematite, on the Martian surface, giving it its red color. Ferrous iron, rather than black ferric iron, is found only where large quantities of free oxygen are present...or were present."¹

Iron also has a very close relationship with carbon, readily combining with and transforming this 'earth substance' to form a harder, stronger metal. Curiously, the iron girdle or 'breastplate' through the northern continents is flanked by another ring of coal deposits, the carbon so necessary for man's forging of iron. While pure iron is soft and malleable, it hungrily absorbs carbon to form the hard, but brittle cast iron, as the earliest forgers discovered with their clay furnaces into which they dropped the ore with pieces of charcoal. In England, by the 15th century, this method was improved with a greatly increased air supply leading to the construction of powerful blast furnaces belching the first industrial smoke into the skies of Europe. In 1856, an Englishman discovered by adding just the right proportion of carbon, how

to make steel, the intermediary stage between the soft, malleable iron and the brittle cast iron.

THE 'BROTHERS OF IRON'

Other metals with a special affinity with iron, and which Rudolf Hauschka describes as 'the brothers of iron,' are cobalt, nickel, chromium, manganese, tungsten, vanadium and platinum. They are all found with iron ore, form carbides, and share practically the same qualities of resonance and lustre, while displaying a similar low level of conductivity of heat and electricity. Yet each displays certain qualities unique to itself and other forms of elemental energy which folklore describes in terms of nature spirits.

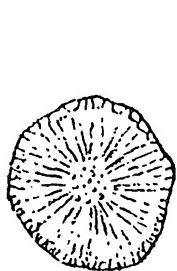
For example, the name cobalt is derived from the 'kobolds' or gnomes who work deep down in the metallic earth veins tormenting miners or helping at their whim. Although sharing iron's reaction to magnetism and forming carbides like iron, cobalt is described as an 'earthier form of iron than iron itself,' its salts and ores 'tinged with a dark and melancholy shade of blue-violet.' Nickel is the 'watery brother' of iron, its name derived from the 'nixies,' the undines or water spirits, and this metal does shine with a watery lustre more in keeping with copper with its salts showing the deep green of the sea. Yet its carbides are tough and resilient and are used for example, in the manufacture of gun barrels. Manganese is said to have the fiery quality of iron with red to flaming violet coloured salts. It makes a very hard steel, and tungsten and vanadium when alloyed with iron produce a steel almost as hard as diamond -- an essential component in steel working tools.

Chromium is well known as a plating to protect other metals, and is also used in tanning and as a valuable mordant in dyeing wool and silk. Platinum, like nickel, is non-corrosive and is described by Hauschka as being the 'most dead' of the iron related metals. Its value, apart from its use in expensive jewellery where it is called 'white gold,' is that of a crucial catalyst in industry. Being 'dead' itself it remains unchanged while initiating or speeding up chemical reactions.

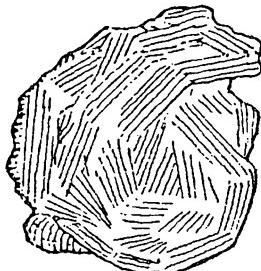
THE METEORIC IRON SPIRAL

As mentioned before, there is a large variety of iron ores and they all show a great diversity in their crystalline formation, but two distinct patterns stand out above the others; a radial tendency seen in marcasite, and a spherical arrangement seen for instance, in the ore hematite. When these two dynamics, the radial and the spherical combine we see an obvious spiral pattern emerging, which shows up in the ore siderite.

"The spiral tendency always arises when time enters space and develops towards a centre," Hauschka writes in his illuminating book *The Nature of Substance*. "The fact that this dynamic shows up so clearly in iron ores points to the fundamental role played by the iron process, for it transforms spherical forces quite unrelated to the laws of earth into radial



Marcasite



Siderite



Hematite

forces working towards a centre. One can say that the function of iron is to help cosmic, weightless elements to enter the sphere of gravity.”²

These cosmic elements include vast quantities of pure meteoric iron dust which shower onto the earth continuously, an estimated several millions of tons a year. Some of this invisible iron naturally precipitates in snow giving rise to the saying that “snow is the poor man’s fertilizer.” Most frequent in the autumn, these meteoric showers are said to radiate from the constellation of Scorpio, the astrological sign which is coincidentally ruled by Mars.

Hauschka goes on to say: “Iron is the only substance which makes visible in an archetypal picture the incarnating force during its spiral descent, for the path followed by meteors is indeed a spiral, the result of interacting radial and spherical forces.”

George Washington (not the president) in *The Zodiac and the Salts of Salvation*, also refers to this process when he describes the “watery ether above” filled with the smallest particles of iron, without which “there would be no means whereby ether could penetrate either into man’s body or the body of the earth.”³

THE “BREATHER OF THE METALS”

As a miniature replica of the earth and the cosmos above, we find iron playing a major role in the microcosm of the human body, permeating the bloodstream and oxygenating the blood. Rhythmically with every breath, we take oxygen from the air into our lungs where it chemically combines with the iron or Ferrum Phos. to give us our red blood. From the lungs via the heart where all the blood in the body passes every three minutes or so, oxygen is carried throughout the system. “The amount of oxygen we are able to absorb into our bodies from the air we breathe depends entirely upon the amount of iron present in the blood to combine with it and carry it to every extremity of the body.”⁴

As we breathe, the presence of iron permeates our system with the energy and rhythm of Mars, giving us life and reflecting the wider, measured

orbit of this planet which swings with its own eccentric rhythm close to and then widely away from Earth.

Just as the smith works externally on the forging iron, so internally our bodies are a kind of furnace with our lungs as the bellows and the iron kindling the fire of chemical reaction with oxygen, renewing the cells and giving the energy for life. But plants too are equally dependent upon iron where it acts as a catalyst for chlorophyll formation. Although iron directly enters the haemoglobin in the blood, it does not enter into the chlorophyll, rather it is manganese (one of iron's 'brothers') which enters the chlorophyll. Pelikan observes that "chlorophyll and haemoglobin are so completely attuned to each other that they maintain the air in perfect equilibrium between oxygen and carbon dioxide (whatever the plant takes from the air is given back by the animal, and vice versa), and that the two breathing substances are so similarly constructed."⁵

Whereas water creatures that breathe with copper tend to be almost amorphous in shape, the red-blooded breathers of iron display a far more highly defined form and will for individualized action.

THE IRON REMEDY

When we are deficient in iron the blood is anemic and pale, the Mars will and energy is lacking and there is a general sense of being ungrounded and unable to act with decisiveness. When there is insufficient iron in the blood the circulation is increased to take enough oxygen to all parts of the body, and this increased motion causes friction, which in turn results in heat. In the body this manifests as fever, or inflammation.

So homeopathically Ferrum Phosphoricum is indicated for these symptoms of heating, for hemorrhages and injuries, congestion, depression, lung problems, in fact, all sickness calls for increased oxygen (and therefore iron) to detoxify the system. I have found it to be very effective taken in the first stages of colds and febrile illnesses.

When cast iron pans were used for cooking, a deficiency of iron was relatively rarer than it is today with steel and aluminum (poison!) cookware. But the level of iron in the body can be boosted with green leafy vegetables and herbs, vervain and particularly stinging nettle which has a remarkably high iron content. It was once widely used as a spring tonic after cooking neutralized the poison in the young green leaves. Natural scientist Lilly Kolisko shared Rudolf Steiner's enthusiasm for this plant in agriculture, writing: "The stinging nettle regulates the iron household in nature," when there is too much iron in the soil nettles can be planted to attract the superfluous iron away from the other plants. Kolisko also discovered that nettles help to regulate the nitrogen in compost heaps when added in homeopathic doses.⁶

Overall, iron is a great rejuvenator carrying vital forces throughout the etheric and physical organism, but when the iron forces predominate they

tend to rigidify and become instead anathema to life itself. A fine example of these two expressions of the Mars-iron nature is the oak, a tree revered as a symbol for strength and generative power by the Celtic Druids and many other native people; but the oak is also harvested for its bark which has long been used in the tanning of leather, a type of mummifying process.

Hauschka writes "...the Mars impulses at work in iron are the carriers of the forces of embodiment," but "these forces lead to mummification if they become too active and overwhelm the system."

By taking this a step further we can see how the over-predominance of iron (particularly in its hard steel form) in this machine age has led to a rationalistic, mechanical way of looking at the world, inducing a kind of mental rigidity where the creative thought processes are indeed mummified; where the virtues of industrialization are glorified at the expense of Nature. One example is the tanning industry itself which resulted in whole forests of tan-oak being stripped in northwest California, beginning a slow drying of the region and a gradual transformation into desert-like conditions. Here we may marvel at the wisdom of the Druids who foreseeing its consequences forbade the use of iron.

These two qualities of iron, the incarnating and 'fixing' qualities are also evident in the Egyptian deity Ptah who, although one of the most important creator gods and chief patron of all metal and stone-workers, is curiously depicted bound as a mummy with only his hands free to work at his creations. Mummified, he represents the vital fire of spirit incarcerated in matter; he "materializes the metaphysical principles" of creation and is found "in every heartbeat and every sound." As smelter, caster and sculptor, Ptah created the great rectangular iron plate which formed the floor of heaven, upheld by four pillars which marked the cardinal points and the four directions of space. These are the cross of the four elements in the old sign for Mars surmounting the circle of the Sun ☉ a mirror image of the sign for Venus. But while Venus is rising from the sea, alchemically Mars-iron describes, like Ptah, the spirit descending into the corporeal, or the Sun sinking beneath the cross to be hidden in the darkness of the earth.

This descent of the Mars force is even evident in the experiments of Lilly Kolisko where she describes the characteristic pictures formed by Iron Sulphate as it crystallizes on filter paper. In *Spirit In Matter* she writes: "They look similar to fingers pointing downward, sometimes like a closed fist, with one pointing finger. A strange, but often noticeable phenomenon is a minute deposit of Iron salt at the end of the finger-like form, adding to the impression of a finger with a nail."

Where Ptah incarnates the sacred fire of life, the god Set who rules the metal iron, fixes this living fire into the flesh, binding the soul to the body with the heavy forces of earth. In very ancient times Set, as the son of the primordial goddess, was regarded as a friend of the dead, helping them to climb the ladder reaching to the iron floor of heaven. However, in later times

he was vilified and cast out to rule the barren scorching deserts so reminiscent of iron's planet Mars; condemned to an eternal struggle against his twin the sun-god Horus. Here we see the rhythmic processes of iron reflected in this war between Set and his opponent as they oscillate between life and death, light and darkness, liberator or soulbinder.

Richard Hoagland, who wrote the remarkable book¹ about that enigmatic Face and pyramidal city on Mars photographed by NASA on the Viking expedition, contemplates the possibility of a cultural legacy inherited thousands of years ago from the inhabitants of the Red Planet and recorded in the construction of the Egyptian pyramids. Although 'straight' science immediately denied the existence of the apparently human Face, the Martian Mysteries continue. The Soviet Mars probe Phobos 2 has also been reported to have transmitted pictures of a huge city-like structure. Dr. John Becklake of the London Science museum commented:

"The city-like pattern is particularly fascinating. It's 60km wide and could easily be mistaken for an aerial view of Los Angeles. The criss-crossing lines on the film frame are about 4km wide. And they show up on infra-red which means they're emitting heat. That's very puzzling indeed considering that Mars has an extremely cold carbon dioxide atmosphere."⁸

Hoagland's observation mentioned earlier on the red ferrous oxide on Mars being "found only where large quantities of free oxygen are present...or were present" certainly points to the possibility of life having existed once on Mars. Perhaps not so long ago, as Tom Brown investigated in the *Journal of Borderland Research*,⁹ giving among other evidence, photos published in the September 1955 issue of *National Geographic* that show distinct green areas on the red planet. The article states that: "By 1954 the new green area covered some 200,000 square miles." What happened to the green areas? As Tom asks: "Did the planet change or did the method of reporting to the public change?" Or both?

Hauschka takes our connection with Mars even further back in time when he writes: "We came to know the Mars process as the force that makes incarnating possible. Thus there must always have been a stronger than usual bond between earth and Mars, even before the earth became a solid body."

OCCULT IRON AND THE MYSTERIES OF BLOOD

Astrologically, the planet Mars and the energy of iron rules the two zodiac signs of Aries and Scorpio, expressing the qualities of dynamic energy, courage and sexual drive. The desire nature is powerful if Mars is rising or strongly aspected in the horoscope. On its lowest level this is the Rambo syndrome, "a feed, a fuck and a fight" mentality so prevalent on today's television, where the powerful sexual energy of Mars is subverted into the phallic substitutes of bigger and more deadly guns blasting a trail of carnage across the screen. To be sure Mars thrives on challenge and power, but the greatest challenge is the power and discipline over self, and on its

highest level the expression of Mars is a powerful uncompromising creativity. Then Mars, like Ptah, "represents the emergence of new forms of self-expression through the interplay of Spirit and matter." The symbol of Aries with its spiralling rams horns, also described as a fountain, is an apt description of the "tremendous outpouring of life force inherent in the first sign" -- a symbol also perfectly expressing the spiralling descent of meteoric iron as it showers to earth, carrying from the cosmos the forces of life.

Appropriately Mars rules the red blood corpuscles, the male sexual organs (as Venus rules the female), the nose, muscles and excretory tract. Its energy is found in occupations dealing with sharp tools and weapons, soldiering, surgery, butchery, some forms of research, and any job where fearlessness and an iron discipline is necessary.

In the Jewish system of knowledge known as the Qabala, the sphere of Mars on the Tree of Life is also represented by images of war; a mighty warrior in his chariot; the symbols of a sword, spear, scourge and chain (and curiously, the five-petalled rose, a symbol of the feminine). This fifth sphere is called Geburah, meaning Strength or Severity, and here the highly dynamic and fiery Mars-iron force is focussed to bring the virtues of energy and courage, or the vices of cruelty and destruction. In Geburah is found the sacrificial priest, the pruner, the katabolic force which breaks down old forms and destroys them to release their energy.

This can be identified with the Egyptian *sekhem*, "the pitiless force that wills the destruction of one form for the conception of another," personified by the red lion-headed goddess Sekmet, the consort of the iron Ptah and the power behind his creations. Her name is the root of the Hindu *shakti*, the female creative energy typified by the mother goddess Kali. She is honoured with red wine, blood and ritual sex -- blood the vehicle of the Mars-iron energy both biologically and magically.

Blood gives power to the sacred spears of Mars and Horus; iron is ruled by the African deity Ogun and is used in his rites of blood. There are more wars, more blood spilt on the earth now in our 'civilized' times than ever before as Mars demands his sacrifice for man's use of the sacred iron. The destruction of Nature, the pollution of our world, it can all be linked to man's abuse of this humble metal we have taken for granted for too long.

The deeper nature of iron has been forgotten, hidden like the alchemical sun in the dark womb of the earth but still contained in the name for iron, the Latin *ferrum* derived from the root of the verb *fero*, meaning "to create, to form, to bear..."

It has been forgotten that Mars was originally associated with agriculture rather than war, as a 'dweller in the woodland' who protected the crops and herds from thieves and wild animals. Even earlier, the rites of blood associated with Mars referred not to the blood of war but to the female blood of sexuality. Tuesday, or Mars-day, is sacred to Kali the goddess of Time and Blood; it was on Tuesday according to a Jewish tradition that Eve began

menstruating. As occultist Kenneth Grant explains, female blood was “the earliest type of Mars as the mystical energy of the goddess,” before the feminine mysteries of blood were superseded by the solar-male cults.¹⁰ It was the first blood sacrifice, the first sacrament of life. The violent heat and energy of Mars “denoted feminine power at its height,” expressed so vividly by the rapacious lioness Sekmet whose thirst is quenched by the blood of the wicked, or the bloodied Kali dancing on corpses in the cremation ground.

Her nature is two-fold, like iron. She is both creator of life and in another form she is called the ‘Night of Destruction,’ which happens at the end of the world and which is necessary before a new world can come into being. She is the explosive, unpredictable power of Nature. She is also the purifying power of iron and was said to come into being to combat the demons of man’s iron-based greed and materialism.

This purifying and healing power is evident in the sign of Scorpio and is also observed in nature, in iron’s close relationship with arsenic where it binds this highly poisonous substance into an insoluble and harmless mineral. This process is also constantly taking place in our own bodies where the iron in the blood works to neutralize the cyanide-like poisons produced by the digestive process.

“By virtue of its iron content the blood sets up healing processes to oppose these pathological accompaniments of the unfolding of consciousness.”¹⁵

Even the sea is purified with iron which precipitates with poisonous heavy metals to fall as mud on the ocean floor. With the energies of iron, with the steel will and ‘rite’ action of Kali, we can find the way to detoxify the environment and ourselves, and create a new world.

These times we’re living in could be called the culmination of the Iron Age, the phase described by alchemists as “an active descent of the Spirit into the lowest levels of human consciousness...so at this stage of the work the Spirit appears submerged in the body and as if extinguished in it. This is the ‘outermost’ coagulation, and the threshold of the final completion -- the transformation of the body into the Spirit-become-form.”¹¹



TIN

Jupiter's Thunderbolt

Back in ancient times when the gods were not only worshipped but took an active role in the affairs of their humans, we come across many references to the precious metals, prized for their magical properties as well as their more practical value. Sacred objects and talismans crafted in metal and imbued with divine power were often given as gifts to those who were specially favoured by the gods.

For example, we read in the poet Homer's *Iliad*: "He spoke and hurled his javelin with weighty hand; not in vain, for he hit him below the knee on his shin bone, so that the tin covering of the new, strong shin-plate sounded with a frightful clash; yet the copper weapon bounced back and did not penetrate the shield, a gift of the gods."

Among the metals, tin has always been held sacred to Jupiter, both the planet and the great protective deity of the Romans. A magnificent temple in Rome built by Etruscan architects in honour of Jupiter, Juno and Minerva was the centre of religious life of the state. *Jupiter Optimus Maximus* was the great god of the Capitol who ruled benevolently over all affairs of state and law, oaths and treaties, striking down enemies with his thunderbolt, while "governing for the good of the governed," an unusual concept in today's world.

The Greek form of Jupiter was Zeus, ruler of gods and mortals. A statue of this deity from around the 5th century B.C. was over 40 feet high, richly decorated, and known as one of the Seven Wonders of the ancient world. As the planet Jupiter is a giant in the solar system (almost a small sun itself), so Jupiter-Zeus shone like a sun in the pantheon of gods.

There is another reference to tin, this metal of Jupiter, in Homer's *Odyssey* where the hero Odysseus is described as crossing over to the magic shores of Cornwall, famed for some of the earliest known tin mines since the Bronze Age. In the ancient Celtic world tin and bronze were highly prized and tin from the British Isles travelled through ancient sea lanes to the

Mediterranean and as far afield as the Orient.

In *Metal Magic*, Mellie Uyldert tells of the fearless Tartessian and Phoenician seafarers who on their quest for tin used the Isles of Scilly, "this ancient desolate archipelago" as a major trading post, exchanging copper, pottery and salt for the tin brought and stored there by the island inhabitants. The Romans later called these islands the *Cassiterides Insulae* from which our world for tin-ore *cassiterite* is derived, also the Greek word for tin *kassiteros* and the Sanskrit *kastira*. The Romans called tin 'white lead' or *plumbum album*.

The process of its mining was recorded by the Roman Diodorus (8 B.C.) who described how this metal "was hewn from rocky ground, extracted from the rock by melting, purified and poured into moulds," the same method used for thousands of years.

As the Iron Age gradually took over many ancient tin mines were abandoned and lay silent in the shadow of the Dark Ages. It was due to Paracelsus, Biringuccio, Leonardo da Vinci and Agricola (his *Re Metallica* of 1556), that the old methods of mining and metallurgy were reintroduced and the tin mines came to back to their noisy life. By the later Middle Ages tin was again in common use. Combined with lead it formed pewter from which household utensils were made, as well as all the implements of the medieval church. The horsetail plant, high in silica (and a mineral closely connected with tin) was used to scour and shine this popular alloy.

While the rich had their bags of gold and silver, small tin coins were minted in 1558 for "small traders and innkeepers." While the rich were born with the proverbial silver spoon in their mouths the poor had spoons of tin (both of these metals incidentally, were known to improve the quality of the food on which it was served.)

All over Europe, Uyldert tells us, the metal workers, "all those who work with the hammer" had their own guilds, and up until the time of the industrial revolution gypsy tinkers were a common sight in the neighbourhood repairing old kettles and recycling any broken or worn utensils which could easily be melted down and recast.

The nobility of tin resists the weathering of time, as pewter jugs found on board a sunken Swedish ship testify, still in good condition after more than 300 years under the sea; and tin objects unearthed after 1800 years beneath the city of London 'shone as new.'

THE SPECIAL PROPERTIES OF TIN

"...in tin strength of form and plasticity of substance are ideally united."²

Tin shines with a silvery sheen, it is a stable metal and does not oxidize. It has curiously contrasting properties; although soft and pliable (its softness lies between lead and gold) it has a crystalline structure of great inner strength. It also has a brittle quality; when bent, it makes a crackling sound described as the 'tin cry' as the inner crystals rub against each other.

Researcher Wilhelm Pelikan notes tin's unusual tetragonal crystalline structure when compared to the other six traditional planetary metals which generally crystallize in the form of small octahedrons.

In contrast to mercury, tin has the greatest spread between its melting point (2320°F) and its boiling point (20680°F). It strives to maintain its equilibrium between extremes. When heated it loses its softness to become hard and brittle and then disintegrates into a powder. At low temperatures instead of freezing into a more rigid shape it also disintegrates into an amorphous powdery substance.

This powder has the curious property of infecting other tin surfaces it comes into contact with, first by forming blisters that spread until all the metal 'sickens' and disintegrates. This sickness was called the 'tin plague' and was the scourge of tin roofs in the severe cold of winter.

Tin, like the metals of the other planets 'above the sun' is a poor conductor of heat and electricity, but as Pelikan mentions, at the extremely low temperature of liquid helium it suddenly becomes 'superconductive.'

Tin is usually found in granite rock in the form of tin-stone, the ore cassiterite. Considered to be the oldest primeval rock found on the planet, granite is normally formed of quartz, feldspar and mica, but when a vein of tin enters the rock it destroys the feldspar and tinstone takes its place; the accompanying fluorine minerals change the surrounding rock and it becomes enjewelled with topaz.

According to Uyldert¹ tin in the earth's crust occurs mainly in a ring around the earth which coincides with the ecliptic, at an angle of 23½ degrees to the equator, in the lands of Bolivia, Nigeria, Indonesia, Burma and China. Much of our tin comes from the islands of Malaysia (one of the highest producers), and is also mined in Spain, Portugal, Japan and Tasmania, all of these areas transmitting through the tin the forces of the planet Jupiter. These forces form the tin veins into curious zig-zags in the rock, like forked lightning, the signature of Jupiter's thunderbolt.

Lilly Kolisko describes Goethe's fascination with granite which along with gneiss he considered the archetypal rocks out of which many other rocks and minerals developed. He observed that "a remarkable influence proceeds from the metal Tin; this has a differentiating influence, and opens a door, through which a way is provided for different metals to be formed from primeval rocks."⁴

USES OF TIN

Pure tin is quite expensive, it forms less than 2% of the world's ores, so we see most tin used in the form of alloys or as a thin coating to protect and plate other metals. Everyone is familiar with the humble tin can, where a thin layer is used to coat iron to prevent it from rusting, and to provide food with the preserving qualities of Jupiter. Flowers last longer in a tin vase, and beer (ruled by Jupiter the jovial) is said to taste better when drunk from a tin

mug.

Tin combines easily with other metals such as copper, zinc and nickel which benefit from its soft and pliable nature, and also its inner strength. The large heavy bronze church bells in medieval days were said to be cast from four parts copper to one part tin. Other musical instruments such as organ pipes, flutes, cymbals and gongs are made of tin alloys, evoking the pleasure-loving Jupiter who presides benevolently over music and musicians.

Tin was a rare and valuable metal for the Babylonians and Egyptians, and jewelry made from tin has been discovered in old Persian tombs. The ancient Egyptians used tin salts as a mordant for dyeing, and it is put to the same use in industry today. Although being colourless itself, tin has the quality of bringing out the colour which lies latent in other substances.

Tin is also widely used as solder when alloyed with other metals including lead. It fuses metal to metal, just as the Jupiter-tin force links bone with bone through the cartilage in the body, or thought with thought in the realm of the intellect.

Tinfoil is another common form of this metal, also once made by the Romans who used it for mirrors. Today tin is used in glassmaking, in the silk trade, in weaponry, technology and steelmaking and as bronze in heavy industry. The purest tin, Uyldert writes, "is used in nuclear reactors, and in electronics and space travel: it is 99.99995% pure."

TIN IN THE ORGANISM

"In the course of time the planet Jupiter weaves an invisible net as it moves in its orbit. This net encloses the Jupiter Sphere. The influences of this sphere penetrate the whole earth and everything within and around it..." L. Kolisko

The influences of the Jupiter-tin force in the organism are shown at work in the shaping or moulding processes of the body, the development of form from formless embryonic substance. Describing this process, scientist Lilly Kolisko writes: "What Nature does is similar to the activity of an Artist as he moulds some malleable material, such as clay, into a definite form."⁴

This moulding force works particularly in the muscular system, moulding the outward form of the body and the soft organs into a definite shape. Continuing on from this purely physical process, the tin force expands its sphere of activity to work in the gradual development of the thinking process, "...this spiritual activity, with which Man shapes his thoughts, is not only connected with the forces which mould his brain, but also with all the shaping activity present in the whole bodily organization of the human being."⁴

For the ancient Greeks it was Zeus who created the power of thinking and ruled supreme through the cosmic power of his thoughts. This tremendous creative power is illustrated in the ancient myth of Pallas Athena, his daughter who was said to be born springing fully-armed from his forehead as the incarnation of wisdom.

While the tin force moulds the body and gives the power of thinking above, it also works in the largest organ in the body below -- the liver. From Plato's *Timeaus* we read:

"Zeus formed everything. He shaped the conscious soul of Man, and the upper part of the human being, the head. But there was one part of Man's soul which desired not only thoughts but also food. The gods placed this part in the region of the diaphragm...Although the lower element works in the liver, yet this organ can also be in contact with truth. Thus, within the liver, is the seat of prophecy, and so the Greek seers look upon the liver as a kind of oracle. This, the liver, is a lower province of the kingdom of Zeus. Its purpose is to create order and to cause a lower type of consciousness to prevail within the lower part of the human being."

This organ, or gland, is a place of fluid organization and equilibrium, a complex chemical laboratory where substances are broken down and transformed as required, among other services providing the sugar necessary in the bloodstream for muscular movement.

There is a higher tin content in the liver than any other organ, but the greatest amount of tin is found in the mucous membranes and tongue, another organ of Jupiter with which we mould our thoughts into words or song.

In the mouth starch is dissolved and changed into sugar, a process which is reversed in the liver. In the mouth we see the relationship of tin to fluorine, silica and calcium as it is found in the ancient granite rock, where the tongue and mucous membranes are together with the teeth, high in fluorine and combined with these other minerals.

JUPITER THE GREAT HEALER

"Tin may be broadly described as a remedy that regulates opposing fields of force, on the one hand, those that appear in construction, growth, and swelling, and on the other hand those of solidification and drying up."

Wilhelm Pelikan

With its powerful beneficent rays Jupiter has always been regarded as the great healer, in traditional astrology ruling the liver, the hip joints and pituitary gland. Goethe, who was so fascinated by tin, often stayed in the region where tin was mined and said he always felt well and happy there.

While tin as a poison is deposited in the softer parts of the body such as the liver, the muscles and brain tissue, so these parts are most susceptible to tin's healing forces when specially prepared.

Homeopathic tin is known by the latin name *stannum*, which along with the word *tin* and the Germanic *zinn* are derived from the Celtic *ystaen* or *sten*. This remedy strengthens and regenerates. "Its play between fluidity and form enables tin to intervene between the etheric and the physical processes."²

Stannum can be highly beneficial for disorders of the liver, for congestion, hardening and cirrhosis, and in illnesses where the balance of the

fluid system is upset, such as in the brain with hydrocephalus, in meningitis, tuberculosis, and bronchitis. It is also a remedy for the joints, the cartilage and ligaments joining the bones, in such degenerative diseases as arthritis.

JUPITER, TIN AND SUNFLOWERS — The Kolisko Experiments

To bring the relationship between tin and the planet Jupiter back into the more rigid discipline of science, we can turn to the work of Lilly Kolisko who carried out many experiments with tin salts and published the results back in 1932. They clearly demonstrate the changes occurring in the crystallization of silver nitrate and tin chloride, or gold chloride and tin chloride during conjunctions and oppositions of the Moon and Jupiter, the Sun and Jupiter, conjunctions of Jupiter and Mars, Jupiter and Saturn, etc. These studies also showed that the formative forces working in tin were strongest during midsummer, in the months of June, July, and August, when there is the greatest light in the atmosphere.

To explore Jupiter's influence not only in the metallic realm but also in the world of plants, Lilly turned to the old herbals, such as Culpeper's well known herbal encyclopedia. In the old herbal tradition, each plant is said to be governed by a particular planet -- it is the embodiment of specific planetary forces on earth. To explore the truth behind these occult correspondences, Lilly chose the sunflower as a test, a plant said to be ruled not by the Sun as its name suggests, but by the planet Jupiter. Steiner had mentioned that the planetary forces could be seen at work in the colour of the flowers, for example, the forces of Mars could be seen in the red rose, Saturn in blue flowers, and Jupiter in white and yellow flowers.

Having already discovered that solutions of tin are influenced by and reflect the forces of Jupiter, Lilly carried out experiments involving tin and sunflowers. She made dishes out of the various metals, filled them with rainwater and placed seeds from the same sunflower in each. She discovered that the seeds in the tin dish started germinating first after only 24 hours, twice as fast as mercury and over three times as fast as lead.

In another series of experiments Lilly treated the sunflower seeds with the seven different metallic salts, from the 1st to the 60th potency, over 2000 plants in one experiment alone. Again, the seeds treated with tin were taller, stronger and healthier than the others and, in fact, the sunflowers treated with the Sun's metal gold grew quite poorly.

To take this study a step further, Lilly also germinated seeds during the opposition of Jupiter with the Moon and during the conjunction of these two planets. Using tin chloride she discovered that the sunflowers grew much higher and better during the conjunction of Jupiter and the Moon, than during their opposition. Even the control plants in rainwater grew better during the conjunction.

Exactly the same experiments were carried out with other plants of Jupiter including marigolds, with Jupiter's golden-yellow flowers, and

maple tree seedlings said by Culpeper to be ruled by Jupiter. Again the best results were obtained with tin chloride at the conjunction of Jupiter and the Moon.

These studies of Lilly's, done with her husband Eugen, which are detailed in their wonderful book *Agriculture of Tomorrow*, give a new perspective to an ancient field of knowledge that deserves much wider recognition among modern scientists and farmers than it has so far received.

JUPITER – the “Light-Bringer”

One of the most interesting things about tin, and something that sheds some light on the deeper nature of Jupiter's metal is its affinity for silica -- first as quartz in the granite where tin-veins are found, then again in the organism where the shaping processes of tin and silicic acid are interconnected “to create and maintain the boundary between the inner and outer world.” High concentrations of tin and silica are found in the skin, our own individual physical boundary with the world. Silica is also present in the eyes which allows the outer light to penetrate within and the inner light to probe without.

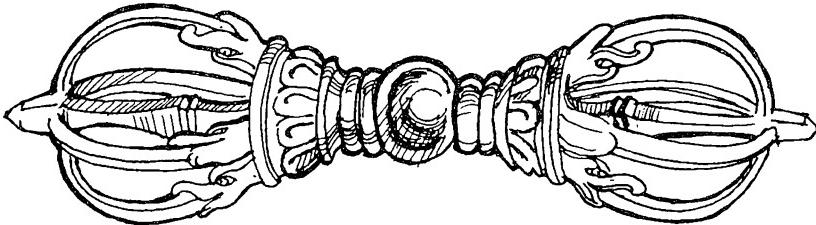
That silica is connected with light is obvious, as anyone can see who has gazed into the clear depths of a pure rock crystal which, “like a sense organ, is fully open and pervious to the cosmic forces, to light, to warmth.”² We even find silica's companion tin-ore in crystalline rather than metallic form, sometimes transparent but usually discoloured with dark-brown or black.

Silica is found in the organism in the brain and nervous system, and it is the biochemical cell salt attributed to the sign of Sagittarius ruled by the planet Jupiter. Silica is a substance that enables the light forces of the cosmos to permeate the body and the earth, as demonstrated by further experiments of the Koliskos, and brings to mind one of the most ancient names for Jupiter which is *Lucetius*, the light-bringer. In Italy he was worshipped on the summit of high hills closest to the sky and the light.

In the sign for Jupiter the lunar crescent is rising above the cross of the four elements, which alchemically symbolizes the soul freeing itself from the earth forces and becoming receptive to the light of the spirit.

This is reflected in the Qabalistic tradition where Jupiter rules the sphere called the ‘Receptive Intelligence,’ the fourth cosmic power zone on the Tree of Life. With the image of a mighty king -- the law-giver -- this is described as the sphere where the archetypal idea is formed, giving our ability to form abstract concepts which are then brought down and ‘earthed’ in the world through action, or in occult terms, “it is here the adept receives the inspirations which he works out on the planes of form.”⁵

The inspiration or light of Jupiter is transmitted through his thunderbolt, through the electrical lightning charge he hurls toward the earth, as for example, in the Tibetan system through the ceremonial and radionic instru-



Tibetan Dorge

ment called the *dorje*, which means ‘thunderbolt.’ In the Hindu tradition he takes the form of Indra, the lord of fire and lightning, or the Scandinavian Thor with thunderbolt in hand, empowering the visions of prophets, philosophers, great teachers, and artists.

Astrologically Jupiter is said to embody the principle of expansion, and individuals with this planet working strongly in their horoscopes are expansive, intuitive, jovial, often outspoken and eager to explore the world whether intellectually, emotionally or through the senses. The half-animal, half-human centaur of Sagittarius perfectly symbolizes the dual nature of Jupiter. On one hand Jupiter, the teacher or initiator, expands and develops the higher mental and creative powers, seeding the consciousness of the student with the light of higher knowledge and universal laws. On the other hand the negative influence of Jupiter replaces truth and justice with hypocrisy and tyranny, and pleasure of the senses with the greed which drives our consumer society deeper into a staggering debt.

Not surprisingly, the pleasure-loving Jupiter rules over vineyards and was a much celebrated god of wine -- but it's well known that too much wine damages Jupiter's own organ, the liver.

Amon was the Egyptian Jupiter known in his form of Amsu as phallic and virile, like Jupiter who was notorious for seducing and impregnating many, many goddesses in the Roman pantheon -- as tin easily joins to alloy with other metals especially giving its strength and hardness to copper, the soft metal of Venus. (Curiously, photographs of the giant red spot on the planet Jupiter's surface look remarkably like the female sexual organ -- on a cosmic scale!) The creative energy of Jupiter is said to spiritualize the flesh through the transmission of his sacred fire (or thunderbolt) of life, the energy necessary for the continuation and evolution of the human race.

This recalls Goethe's observation of the metal tin, whose influence 'opens a door' and provides a way for the evolution and metamorphosis of other metals from primeval rock.

Without the light of Jupiter, the soul would remain imprisoned within the darkness of the earth.



LEAD

Saturn's Heavy Metal

“Grey-haired Saturn, silent as a stone.” Keats

Of the seven ancient planets Saturn is the outermost, circling in its lonely orbit the border of our solar system, marking the threshold between human consciousness and the infinite unknown spaces beyond. Thus Saturn ruled the planetary pantheon before the more recent discovery of Uranus, Neptune and Pluto, whose influences have brought alien mutations into the human sphere.

The mythological Saturn, whose name was given to this planet at least as far back as the 4th century B.C., was a god of ancient Italy, also identified at an early time with the Greek god Cronus who was the youngest of the Titans, the monstrous children of Sky (Uranus) and Earth (Gaea). Hated by his father, who imprisoned his children in a cave in the earth, Cronus conspired with his mother Rhea to get revenge. He castrated his father with a sickle and took his place as ruler, but he was in turn as ruthless a tyrant. Warned that his own children would one day dethrone him, he ate them at birth. Only his son Zeus escaped and after a long battle overcame Cronus and the violent chthonic powers of the Titans who were banished to the underworld.

The figure of Cronus, or Saturn, lingers on in the popular imagination, the grim reaper of souls with his scythe, the emaciated ‘bone man’ who is Death. While Jupiter, or Zeus, was a god of the light, Saturn came to embody all of the forces of the dark, and the heaviness of earth.

THE GREY, GLOOMY GLEAM OF LEAD

Lead, the metal of Saturn in the old occult and alchemical traditions, is dense and heavy, soft but brittle and easily broken when stretched. Although lead melts easily in the heat of a candle flame into a silvery liquid, when it hardens this shining lustre soon fades into a grey gloomy gleam. It

is the metal most powerfully expressive of the earth-forces, chief of the heavy ‘base’ metals. There is no moisture in lead, none of the vivifying water which brings the sparkle of life. Lead, instead, embodies the hardness of death.

Pure native lead is extremely rare, most often it is found as the ore lead sulphide, otherwise called lead glance, or galenite. The greatest deposits are located in the northern hemisphere, in North America, Europe, in Spain, Germany and Belgium, Australia and Asia.

Lead sulphide is a dense sombre silver-grey mineral. Here the heaviness of lead has subdued the bright volatile sulphur and imprisoned it in primeval rock. And yet, if you hold a piece of lead in your hand it feels surprisingly soft and warm. As Rudolf Hauschka writes, “if one goes on to make a closer study of it, one comes to know another, most important side of lead which has nothing to do with heaviness: the fire that lies hidden in its depths.”¹¹

Apart from lead sulphide there are many other lead ores such as croconite and wulfenite, bright red and yellow ores which sparkle with the fire within. White lead ore brings “hidden fire to expression in the way it is shaped... a network of glittering laminae. It looks amazingly like bone structure. Thus lead unites two very strong contrasting forces: rigid heaviness and revivifying inner fire.”

This is seen also in lead’s close relationship with silver; it is always found with silver, and during the smelting process most of the lead vaporizes to leave a mass of liquid silver protected only by a thin film of lead.

Again lead’s hidden fire is seen in lead crystal (silicate) which when cut, sparkles with the brilliance of diamonds due to the crystal’s high capacity to refract and disperse light. While silver salts are light sensitive and used extensively in photography, “lead salts are not changed by light; they change it by uniting it intensely with darkness in their own substance.”¹²

Lead has been known and used for several thousands of years; by the Egyptians and Assyrians, by the Greeks and Etruscans who used silver smelted from lead ores, and by the Chinese and Romans who made coins from lead. In ancient Italy, lead was used by the Romans for their extensive aqueducts. Lead water pipes evacuated after 2000 years were found to still be in excellent condition, although their earlier wooden pipes or stone channels were far more beneficial to the health, as ‘water wizard’ Viktor Schauberger observed. The emperor Titus was recorded as having some 50,000 slaves toiling for him in the Spanish lead mines.

As it withstands weathering so well, lead was used to build roofs and water tanks in the Middle Ages, and was combined with tin to make the common and very useful alloy known as pewter.

Another more esoteric use of lead is described by Mellie Uyldert in *Metal Magic*,³ in an old tradition from Holland. On New Year’s eve people would melt lead and pour it into a beaker of cold water, and from the shapes it formed as it solidified they would predict the future for the coming year.

Saturn, lead's planet, has long ruled over the auguries and omens of fate.

Today lead is used on an extensive scale, the shielding properties of the insoluble, stable lead compounds being especially valuable as coatings for cables, vats, tanks, boilers, etc. in the chemical industry. Lead paints protect other metals, and the malleable nature of lead has made it indispensable for the manufacture of sheeting and lead plate. It is used in batteries and accumulators, for arms and munitions (from early on as lead pellets for shotguns), and in the textile, ceramics and pesticide industries.

But recent reports have shown an alarming epidemic of lead poisoning in the United States through industrial contamination, flaking paint and lead laden dust. "Before 1950 American towns were literally painted with lead," the *San Francisco Chronicle* (August 23, 1991) reports, a poisonous legacy now afflicting millions of people, especially young children. It is well known that ingesting minute quantities regularly over long periods of time leads to chronic lead poisoning with nerve and brain damage. Although now banned from most gasoline, the anti-knock compound lead-tetraethyl, heavily promoted by oil executives in the 1920s despite warnings from the health authorities, has been a major source of lead pollution.

"Half a century of tail pipe emissions have bathed American cities and towns with a sheen of this cumulative poison. About 800 million pounds of lead were poured into California skies, three-fourths of it from leaded gasoline." It is estimated that 4 to 5 million metric tons of lead from gasoline remain in U.S. soils.

In experiments inspired by Rudolf Steiner to demonstrate the effects of lead on certain formative forces, plants grown in air containing lead tetraethyl showed changes in the stalk cells which sprouted with hyper-active vitality at first, but died off prematurely.

THE SURPRISING WARMTH OF LEAD

Despite lead's chilly reputation it has a strong relationship to warmth, as mentioned before, melting in the heat from a candle flame at 327°C, and vaporizing at 1555°C. Wilhelm Pelikan² observes that: "Although it is solid under normal conditions, it is so strongly connected with warmth that it behaves as though it were constantly at the extreme edge of solidity," another example of lead-Saturn's role of boundary keeper.

For a metal lead is extremely soft, easily scratched with your fingernail, or drawn into a thin wire, or beaten into the thinness of paper. You can draw with lead, which is where our first lead pencils came from. Unless cooled intensely it is the least conductive among the other metals for warmth and electricity, and although it could be described as sluggish, it expands and contracts vigorously when exposed to changes in temperature.

The dullness of lead extends to its resonance: "When we touch a sounding object with lead, the sound immediately congeals, all vibrations cease." It is the last metal you would associate with musical instruments,

except alloyed with bronze, perhaps, for a bell's depth of tone. And yet lead crystal has the purest ring, as the light forces of silica transcend lead's dullness and liberate through sound its mysterious inner beauty.

But in its chemical life lead congeals, or precipitates into insoluble compounds, more so than any other metal, although it combines readily with other elements and easily forms alloys. This precipitating, or calcifying nature of lead can be compared to the calcium minerals which it strongly resembles, and curiously enough lead ores are often found in limestone formations.

LEAD AND RADIOACTIVITY

The protective shielding properties of lead mentioned earlier, are invaluable for this metal's use as a barrier against x-rays and radium in hospitals, and the extreme density of lead provides insulation against radiation in the generation of nuclear energy.

While the sphere of Saturn's orbit in the macrocosm encloses the solar system and provides Earth with a protective shield from cosmic radiation penetrating from beyond, lead on earth helps to protect us from the poisonous rays of nuclear death temples and other sources of radiation that man has let loose upon the planet.

Lead itself is very closely connected with the radioactive processes in nature. As Saturn has come to be associated with Time and Death, so lead is connected with the decay and decomposition of matter which consists of a process of transmutation, setting free the energy trapped in matter in the form of radiation. In the transition of the highly dense and radioactive uranium and thorium towards disintegration, lead is found with an exceptionally high number of radioactive isotopes. In the last stage of radioactive decay, non-radioactive lead is "the final substance which can undergo no further changes." The most lead is contained in the oldest radioactive ores -- it represents the end of a complete cycle of life and transformation, "the ultimate substance of age and death."

THE PATTERNS OF SATURN ECHOED IN LEAD

As the great cycles of Nature turn and return, focussing planetary energies on the earth and bringing life and growth with the Sun's power at the summer solstice, Saturn's season is mid-winter, in the place of darkness and death. Winter is also lead's season, as the experiments of scientist Lilly Kolisko showed, the time of greatest contraction, "when the forces of vegetation withdraw, then crystallization is at its culminating point. Even the water is overpowered by its strength and turns into solid ice."⁴

Solutions of lead nitrate produced the greatest weight of crystallization in the month of February, as compared with their minimum weight in the summer month of June. In many respects lead was shown to be opposite to the forces of Jupiter and its metal tin. While lead contracts, precipitates and

congeals, it is the nature of tin-Jupiter to expand. While tin is associated with light and is most active in the summer and has a close affinity for light's mineral silica, lead is the metal of darkness, and is allied with calcium and the forces of the earth.

To explore the relationship long said to exist between Saturn and lead, Lilly Kolisko used a solution of lead nitrate to study the patterns formed as it crystallized before, during and after a conjunction of Saturn with the Moon. There is a certain period of time lead takes to crystallize normally, but at the exact time of the Saturn-Moon conjunction Lilly found this crystallization to be nearly always delayed, and sometimes the solution failed to crystallize at all. Meanwhile the copper and iron salts remained completely unaffected. "The effects of a conjunction between saturn and the moon are only to be found in the solution containing lead."

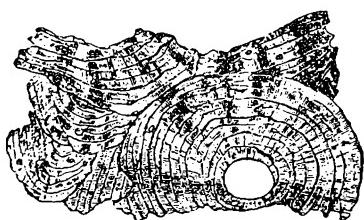
Following up on the results of Lilly, another scientist named Theodor Schwenk performed further crystallization experiments to study the effect of certain planetary aspects on their corresponding metals. For several days before, during and after a conjunction of Saturn with Mars, he studied the patterns made by a solution of iron sulphate, lead nitrate and silver nitrate. In the pictures formed by the crystallization of lead, as Lilly had said, there are no soft and delicate forms seen, for example, in the pictures of silver, rather they are heavy and hard. "Like the wrinkles of old age," she said, "...the formation looks like that of a rock which has undergone the process of weathering. Somehow a process of *ageing* is expressed. Lead adds 'weight' and something that gives an impression of age."⁵

However, on the day of the Saturn-Mars conjunction Schwenk reported that suddenly everything changed and a completely unusual picture appeared. He wrote: "'The broad, heavy 'lead formations' become pointed and narrow and are reduced in number; a strong blackening of the background occurs.'" By the following day, the pictures had returned to their normal appearance.²

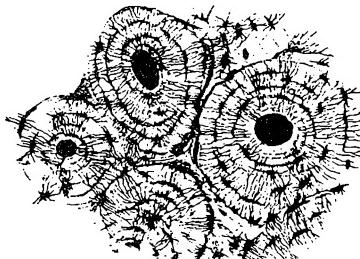
SATURN'S ROLE IN THE HUMAN ORGANISM

The heaviness apparent in the pictures of lead is the nature of Saturn wherever it is found; in the body, Saturn-lead is concerned with the processes of hardening and mineralization. In a young child the bones are still growing and forming from the soft cartilage. It is Saturn which hardens and calcifies, or in other words, sculpts them into their permanent adult form. Again we see the lead-calcium connection, as the bones are made predominantly of calcium, even the form of bones, like the hard trunk of a tree, are composed of concentric rings resembling the rings of Saturn. As we grow older the normal calcifying processes increase, the bones become more brittle, and "physical death takes place because we can no longer overcome the accumulation of hardening processes."

In their book *Saturn & The Human Organism*, Lilly and Eugen Kolisko



Section of bone
after acid treatment



Magnified cross-section
of bone tissue

observe: "What works in the hardest substance, in the mineral, the solid, the skeleton, in the earthly, connects Man with the earth, but in such a way that he must strive continuously to overcome this force. Death takes Man *physically back to the earth; spiritually it takes Man away from the earth.*"⁶ After death only the hard mineral skeleton remains; a dead man can no longer stand up.

The hardest and boniest part of the body is the skull -- consider, for example, the extremely hard and thick skull of a wild pig, or a rhinoceros. While the fontanelle, the soft part of a baby's head, slowly closes during its first or second year, so the child learns to stand up and balance itself between the forces of gravity and the less often considered forces of levity. Detailed physiological studies of the Koliskos' linked the child's ability to stand upright with the faculty of memory, that when the bone system is completed early in life, "forces are set free which are connected strongly with the human character, with the moral, spiritual, individual capacities of the human being."⁶

In the organism even small amounts of lead are extremely toxic, destroying the digestive system and advancing to relentlessly destroy the nervous system and the brain. The bones are damaged and the skin becomes the grey of lead, the victims grow old before their time, become emaciated, and are quickly destroyed. The mineral process becomes too powerful, overwhelming the delicate balance between the forces of life which are carried by the warmth of blood, and the hardening of material substance.

Whenever the influence of Saturn is too strong there is abnormal hardening; lead is found in kidney and bladder stones, in hardening arteries. It causes contraction and cramping, not only physical, as "soul cramps cause fear and anguish, the leaden weight of Saturn." There is a drying and coldness of body and spirit. Life needs warmth, the warmth of blood. In old age the body becomes more fragile and a cooling, a contraction, sets in.

Homeopathically prepared lead, *plumbum metallicum*, in high dilution combats this degeneration, as "the effects of material lead are changed into

the sphere of spiritual influence of lead. That is the force by which Man keeps the hardening processes continuously under his control.”²

As well as being a great remedy for sclerotic conditions, homeopathic lead is also used for alcohol addictions, the cravings for the distilled spirits of the earth. It’s interesting to note the age-old custom of sealing wine bottles with lead; apart from practical purposes, perhaps this also serves to keep the spirit of the wine sealed in? It makes one curious about the effect of lead or lead-lined coffins that were common in Europe at least up until this century.

The organ associated with Saturn is the spleen where the red corpuscles are destroyed and built up again, as in the marrow of the bones where new blood is formed. So even in the depths of the bones, the most ancient symbol of Saturn and death, there is new life developing. The spleen also shares Saturn’s great power of contraction and shrinks considerably in old age.

Two other antidotes to lead’s toxic effects are sulphur and silver, its natural companions in the earth. Sulphur stimulates the heaviness of lead and people often go to sulphur spas or hot springs which bring relief to rheumatics and other saturnine afflictions.

The plants associated with Saturn-lead according to herbal tradition, are the *solanaceæ* family including the tomato, potato and the toxic belladonna, henbane and tobacco.

The cell salt calcium phosphate, which is said to be ruled by Saturn’s zodiacal sign of Capricorn, is a salt which forms the bones and the skeletal part of every cell. This is the limestone building force of nature, a process reflected in astrology where Capricorn rules over occupations dealing with building and architecture and structure on every level, including the social structure of civilization, and the bureaucracy, or ‘bones,’ of government.

THE OCCULT SATURN

“*Saturn brings us the foreknowledge of our own death, from the moment we are born.*”

Anon.

In the old alchemy lead, Saturn’s earthly counterpart, symbolized the ‘base’ metal, the raw material of the work and the first or ‘black’ stage of the alchemical operation, often represented by a raven, a skull, or a grave. In the symbol for Saturn-lead the lunar crescent is beneath the cross of the earth, representing the soul suffocated and darkened by the earth, or “the chaotic immersion of consciousness in the body.”⁷

Here is the point where one turns within to find the spirit, by withdrawing the senses and ‘dying to the outer world.’ But before the gold of the inner sun rises to illumine a new mode of consciousness, this turning away from the outside world is experienced as a time of intense darkness and aridity. In all of the Mysteries of Death, this is where the initiate is identified with, and becomes, the sacrificed god.

Osiris, the black god, was the first deity of the Egyptians to die and be resurrected, demonstrating again Saturn-lead’s contrasting properties of

rigidity and heaviness, and its revivifying inner fire. It was Isis, his sister and wife, who restored him to life. The agent of his death was Set, son of the primordial goddess, from which the name Saturn is derived -- the bones are his symbol. Crossed bones are also the symbol of the Voodoo *loa* Baron Samedhi -- Master of the Crossroads -- who stands at the junction of life and death.

When despair and loneliness rise to choke the joy and love from life, you may be sure that Saturn's shadow is passing by, black as the messenger crows of Cronus. People with Saturn working strongly in their horoscopes tend to be serious, pragmatic, sometimes cold and gloomy, sometimes downright morbid. But they often live to be very old, even despite themselves, and like the mountain goat they can scale the heights through their tenacity, self-discipline and endurance. They can also reveal an unexpected sense of humour.

Saturn brings the tests, responsibilities and ordeals of material life which none of us born to earth can avoid, and was regarded as the great malefic by medieval astrologers. But just as lead has a hidden fire and beauty, so Saturn has another more universal role, providing a bridge to the outer planets and other states of being, if we use the occult knowledge which can only be found in its darkness.

There is another side to Saturn, if we go back beyond its 'heavy' connotations, firstly to discover that both Saturn and Cronus were originally gods of agriculture, with the name *saturn* being derived from the latin *serere*, 'to sow.' Saturn's wife Ops was an earth goddess of crops and the harvest, and the crows mentioned above were also associated with ancient rituals where the barley-king was sacrificed every year, or 'reaped' by the golden sickle of the Goddess, his blood fertilizing the fields for the new year.

The great orgiastic Roman festival of Saturnalia, dedicated to Saturn and Ops, began on December 19 and lasted for several days, celebrating both the winter solstice and the memory of the golden reign of Cronus. All social customs were reversed, slaves were waited on by their masters, and the people exchanged candles and dolls in imitation of the original human sacrifices to the barley-god.

The reign of Cronus was said to have been a golden age, when humans lived like gods, free from work or sorrow or old age, a time when the earth flowered like a garden. When the ancient Titans were banished, there is a version which tells of Cronus going not to the underworld, but to the Islands of the Blest in the northern seas, where he sleeps heavily guarded, but will return.

GODDESS OF SATURN

"*I am Life and the giver of Life, yet therefore is the knowledge of me the knowledge of death.*"

Liber AL vel Legis

To go back even further, before the 'decadent patriarchalism' of

Cronus and the Olympian king-gods took shape from an even earlier mythology, the sickle was originally the symbol of the ancient star goddess of the Great Bear constellation.

In the Qabalistic tradition the female nature of Saturn is clearly expressed in the sphere called Binah on the Tree of Life, described as ‘the female potency of the universe’ and ‘the primordial formative influence...behind and beyond manifesting substance,’ just as Saturn was called ‘the god of the most ancient form of matter.’⁸

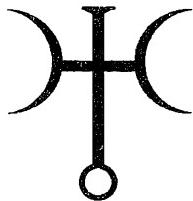
Her symbols are the womb and the cup, and she is both the Mother of all life ‘who binds force into the discipline of form’, and the bringer of death. Through her, life descends into all levels of manifestation. It was once the custom for brides to wear black for their wedding ceremonies, and in Eastern European countries to wear the wedding ring on Saturn’s middle finger, to connect with the female potency of this sphere.

The Hindu goddess Kali, black as space, who wears a garland of skulls and carries a sword, expresses the nature of this primordial power, the dual nature of Saturn which alternately creates and destroys. In all of the old religions which were based on the cycles of nature, death was celebrated equally with life -- in order to live, the barley seed must die.

When worship of the primordial goddess was forcibly suppressed by the new male-oriented religions, the understanding of death became instead man’s greatest fear and taboo. Material and temporal power, the lowest expressions of Saturn, were grasped as if to compensate for the loss of the spirit of the goddess.

The grey-faced rulers who stalk the cold bureaucratic halls of church and state today are the old barley-kings who refuse to die. It is no coincidence that President Bush is a member of the elite and highly symbolic Skull and Bones Club.

But only pollution, decay and destruction mark the end of man’s attempt to dominate nature, and Saturn moves in, patiently, inexorably, to drive this lesson home.



URANUS

And The Radioactive Metals

Stephen Arroyo

Within the vast span of the Milky Way galaxy our solar system exists as one point of stellar light among billions, one tiny cell in the greater galactic body. From Earth we watch the Sun and Moon rise and circle across the sky. We also see the inner planets navigate the dark oceans of night, the luminous points of Mercury, Venus, Mars and Jupiter sparkling with colour, inscribing spheres of energy unseen but powerful in their influence upon us. Fainter is the cold glow of Saturn and beyond this ancient guardian, in the far reaches of our system, lie the mysterious outer planets.

Referred to as the 'ambassadors of the galaxy' by the eminent astrologer Dane Rudhyar, Uranus, Neptune and Pluto symbolize forces which are not completely of the solar system but are within its sphere of influence "to link our small system (of which the Sun is the center and Saturn's orb the circumference) with the larger system, the galaxy."¹

Before the discovery of Uranus, Saturn marked the rigid barrier which the church had imposed on the universe for centuries. Only heretics dared to question the validity of this old system on pain of excommunication, or even death. So the advent of Uranus marked a revolutionary breakthrough in human consciousness, and the beginning of our liberation from the thralldom of an all powerful church.

Astrologically the outer planets symbolize cosmic, or galactic forces which penetrate the deepest levels of consciousness bringing about profound change and transformation. The energies of Uranus manifest in sudden, often disruptive changes producing the unconventional, often eccentric bohemian character who is impelled to break through old structures, inspiring the borderland scientist, the artist and musician, the occultist and inventor. In a more extreme way it also incites the anarchist and the violent revolutionary.

Like Prometheus who stole fire from the gods the Uranian native seeks to bring down the knowledge of higher worlds through radically new and original modes of self expression, hungry for excitement, freedom and experimentation, acting “as a channel through which powerful forces flow with electrical rapidity.” This analogy is particularly appropriate because Uranus, which rules the zodiacal sign of Aquarius, has a strong kinship with electricity and the transference of information through sudden impulses and flashes of insight.

In the physical body Uranus is associated with the electrical impulses of the nervous system. In the occult realm it represents the power of the universal mind, fuelling the “esoteric engineering” of the gnostic scientist, and is concerned with “the perfection of the electrical mindfield.”²

The discovery of Uranus ushered in the age of global communications using electronic technology and synchronistically, with the unearthing of uranium, established the seeds of a far-reaching nuclear religion.

URANUS – THE COSMIC GIANT

It was an amateur astronomer and professional musician named William Herschel who, on March 13, 1781, discovered a new planet far beyond Saturn’s orbit, a planet so distant from Earth it is almost invisible to the naked eye. He gave this faint sea-green tinted disc the unimaginative name Georgium Sidus after his patron King George III of England, but the name was soon changed by popular opinion to Uranus, father of Cronus (or Saturn) and the most ancient god of the heavens in Greek mythology.

For the ancient Greeks Uranus was both the son and father of Gaea, the Earth, who brought forth the first mythological race, the twelve Titans. He was the Sky, the Father Sky, and the father of the gods. But he feared his monstrous children and imprisoned them deep within the earth as soon as they were born. However, with the help of his mother Cronus attacked Uranus while he slept and with “the strongest metal,” an unidentified substance called *adamant*, castrated him. After that he was of little interest to Gaea and soon faded from the mythological drama.

But back to the planet... It is possible that Herschel had only rediscovered a planet that had been mentioned in ancient Burmese writings, an invisible planet they called Rahu. After all, the Dogon tribe of Africa had described the four major moons of Jupiter, and the halo of Saturn’s rings. Also, to the amazement of modern astronomers, they were not only aware of the recently detected white dwarf star which orbits the bright star Sirius, they also knew its orbit to be 50 years!³ So much ancient knowledge has been lost. So much remains for the Uranian explorer to rediscover.

Uranus is truly a giant, about four times the size of Earth and the third largest of the known planets. Its atmosphere is said by scientists to consist mainly of hydrogen and helium; its frigid body of methane and ammonia ices. But it is a strange and eccentric giant, in true Uranian style, and differs

radically from the other outer planets in that its axis is tilted almost on the plane of its orbit. In other words, Uranus spins through space on its side leading scientists to speculate that it may have collided with another huge body in the far distant past, a catastrophic impact that thrust it into its present position.

If you could imagine standing at one of the poles of Uranus with its 84 year orbit, you would experience a 42 year-long day followed by 42 years of darkness. Another curious deviation from the other outer planets is that Uranus does not appear to emit more heat than it receives from the Sun.

The satellite system of Uranus also displays a turbulent history. Photographs returned from Voyager 2 revealed 10 new satellites as well as previously unseen details of the five satellites already known. They showed the evidence of a violent and complex evolution, from the bizarre topography of Miranda with its mosaic of intricate fractures, grooves and craters -- looking as though it had been shattered to bits and then patched back together -- to the long rift valleys and craters of Ariel, the pockmarked craters of dark Umbriel, and the lunar-like cratered surface of Titania. They are landscapes to thrill and awe the inhabitants of our seemingly placid planet Earth.

A system of rings has also been discovered around Uranus, a feature shared by Jupiter and Neptune as well as the famous rings of Saturn. There are at least eight of these narrow, widely spaced Uranian rings, far thinner and more diffuse than those circling Saturn. The stones in these rings appear to consist of big coal-black boulders 'shepherded' by tiny orbiting satellites.

But even with the photographs and streams of electronic data gleaned from Uranus by scientists (and the crumbs of information they throw to the public), Uranus remains, as Bradford Smith, head of Voyager 2's imaging team puts it "...a planet of unfathomable mystery."

THE 'URANIAN' METAL

While the seven planets of the ancients and their corresponding metals and spheres of activity have been well documented by occult tradition -- and more recently 'verified' by scientific experiments, especially through the research of Lilly Kolisko -- Uranus, Neptune and Pluto lie beyond this traditional body of knowledge. So here we take leave of tradition and branch out into a new exploration of the deep connections which undoubtedly exist between Uranus and the equally mysterious metal uranium; a substance that mirrors the transforming and radical nature of Uranus on earth, an incredibly powerful element which has altered the stream of human evolution with devastating effect.

Among ancient traditions the Native Americans and the Aborigines of Australia were well aware of the existence and power of uranium, but there is no direct reference to this metal in alchemical literature although Czechoslovakia, which has large deposits of uranium ore, was a hotbed of alchemical experimentation in mediæval days.

The modern story of uranium begins in 1789, the year of the French Revolution, when a German chemist Martin H. Klaproth discovered a very heavy element and named it klaprothium. Shortly afterwards, he renamed it uranium in honor of the newly discovered planet.

Some 50 years later Eugene Peligot, a French chemist, isolated the first metallic uranium, but it remained practically ignored and was regarded as having few practical uses apart from the glass blowers of Bohemia and the porcelain makers of Saxony who used uranium oxide for the beautiful yellow and black colours it produced. The ancient Romans also used uranium oxide for colouring, discovered in a fresco near Naples with its striking colours still bright after 2000 years. Some uranium compounds are used in photography, but its real power of nuclear fission was only discovered a century later, a discovery intuited by Dmitry Mendeleev who working on his Periodic Table, was convinced that this new element with its great atomic weight (238.03) would be the source of major new discoveries.

It was a French physicist, Henry Becquerel who accidentally discovered the invisible emanations from uranium. During research into phosphorescence he left uranium salts on a photographic plate in a dark drawer waiting for a sunny day to continue his experiments. Later, when he decided to develop the plate he found to his amazement clear outlines of the uranium samples despite the lack of light. He concluded that uranium was "the first example of a metal revealing a property similar to invisible phosphorescence,"¹⁵ or "stored-up light."

Dr Gustave Le Bon (a true Uranian character) took these experiments a step further and scandalized orthodox physicists by saying, and proving, that the radiations were not any form of light, but an absolutely new force. He also demonstrated that all matter emits radio-activity and the special properties of uranium were "only a particular case of a very general law."¹⁶

When Becquerel announced the spontaneous fission of uranium, the scientific world pricked up its ears. Among those keen to explore this new element was the physicist Marie Curie who managed to obtain several tons of uranium waste and discovered other more highly radioactive elements including radium, giving great impetus to these researches.

Although in 1934 elementary uranium was considered to have no practical application, by 1939 there was a tremendous change in attitude when the explosive possibilities of nuclear reaction came to the world's attention. In Italy, Enrico Fermi experimented with uranium by irradiating it with neutrons. Otto Hahn is generally credited with the discovery, in 1939, of the nuclear fission process, but according to other sources it was Marie Curie's daughter Irene Joliot-Curie, who, after repeating the experiments of Fermi, discovered that when a neutron hit a uranium nucleus it split it into two. She is also credited with establishing that in this splitting, several neutrons were released which, hitting neighbouring nuclei would cause further splitting so beginning a chain reaction.

A chain reaction only happens with human intervention, in naturally occurring uranium there are not enough U-235 atoms.

Soviet physicists, in one case experimenting deep underground in a Moscow Metro station where no cosmic rays could penetrate, proved that uranium nuclei could disintegrate spontaneously.

When Fermi fled from Italy at the end of the 1930s Albert Einstein interceded with the U.S. Government to give financial backing to his uranium research -- an element he promoted as an important new source of energy, but more vitally from the government's point of view, could produce a powerful new weapon.

Millions of Chicago residents were unaware one day in 1942 that the most dangerous experiment in history took place in a city sports stadium -- under the bleachers at Stagg Field. This was the controlled chain reaction of splitting uranium nuclei. It is called 'controlled' when one neutron from each fission goes on to produce another fission. But when multiple fission happens, the reaction increases at catastrophic speed, within millionths of a second, creating an explosion.

Fortunately for Chicago, Fermi's calculations were correct: the chain reaction continued for 28 minutes and was then halted. If there had been even the slightest error the city would have been devastated along with its inhabitants.

After his success, Fermi and other prominent scientists involved were taken to the uranium research centre in the desert at Los Alamos and their further experiments shrouded in secrecy. That is, until 1945 when the world witnessed the horror of a deadly new weapon unleashed upon Hiroshima and Nagasaki, claiming hundreds of thousands of lives.

Along with atomic weaponry came the 'peaceful' development of atomic power generation. By 1954 the first atomic power station began operating in the USSR. Then came the first atomic ice breaker called the Lenin, with a small lump of uranium replacing thousands of tons of oil or coal, and the Arktika, which after 3 years navigated its way through the ice sheet of the Arctic Ocean to reach the North Pole.⁵

It is a curious fact that plutonium, a product of uranium, ultimately provided the electrical energy for the Voyager spacecraft to reach Uranus, its cosmic 'parent.'

THE METALLIC URANIUMS

Unlike the other metals described in previous chapters, I have never seen metallic uranium and probably never will. Its production and storage is surrounded by the highest security.

Described as a radioactive metallic element, uranium is silvery white in colour and moderately malleable and ductile. It is slightly paramagnetic but is a poor conductor of electricity. Almost as hard as steel and with a weight close to that of gold, uranium has the highest atomic number (92) of

the elements found naturally on earth (which, according to nuclear physics, means there are 92 protons in the nucleus). Elements of a higher number such as neptunium (93), plutonium (94), americium (95) etc., are man-made. Scientists hypothesize that uranium is the product of the radioactive decay of other elements that once existed on earth, but are no longer found on this planet.⁷

Uranium is never found naturally in its pure metallic state, but is extracted from the many types of uranium ores. Several hundred of these uranium containing minerals have been identified and the richest of these are uraninite UO_2 , the dark bluish-black mineral pitchblende U_3O_8 , which always contains helium, and carnotite. Ore deposits are never very concentrated, a typical ore contains less than 0.3% uraninite or pitchblende, so huge quantities of the ore have to be mined to produce very small, and very expensive, amounts of uranium.

Uranium has 16 isotopes and all but three are human-made. They decay to give off alpha particles to form isotopes of the element thorium. The decay of these isotopes finally ends in stable isotopes of lead. Isotopes are described as atoms of an element that have the same atomic number but different atomic weights.

The most common is called uranium-238 which makes up more than 99% of naturally occurring uranium. The next most common isotope is the rare U-235, which in the eyes of nuclear physicists is one of the most important substance in the world, for the simple reason that it is the only naturally occurring substance which fissions easily.

Another substance that fissions readily is plutonium-239, a substance produced by the neutron bombardment of U-238. This means that it splits into two smaller nuclei of approximately equal size, releasing large amounts of energy. (It is this unsymmetrical splitting of the uranium atom that researcher Carl Krafft uses as one point in evidence for the vortexian rather than the nuclear structure of the atom, although this subject is too complex to enter into here.⁸)

Fission is brought about by bombarding the material to be fissioned with neutrons, so, for example, when the U-235 nucleus absorbs a bombarding neutron it may be split into a nucleus of barium-141 and a nucleus of krypton-92, or iodine-137 and yttrium-97, or lanthanum-143 and bromine-90. Many other combinations are possible and these are called fission products. Fission is the reaction used in nuclear power stations to produce heat, to create steam to drive the turbines, and in atomic bombs to produce the explosion.

The third isotope U-234 occurs naturally only in trace amounts.

After grinding and other processes, the uranium ore is leached and through elaborate processes is converted to uranyl-nitrate from which uranium compounds or uranium metal may be obtained. Among the most common methods used to separate uranium isotopes for medical, industrial,

military and industrial uses, are gaseous diffusion, centrifuges and laser techniques.

Uranium is very reactive, so easily oxidized that in powdered form it ignites spontaneously in air. It decomposes water, and combines directly with many gases. Although inert in alkaline solutions, it reacts with acids to form uranium compounds, which is why it is found more often in acidic rocks, such as granite, than basalt. It melts at 2070°F and boils at 6904°F, and chemically is related to chromium, molybdenum and tungsten.

Uranium is extremely toxic, both chemically and radiologically, which is why the disposal of uranium waste products is one of the gravest problems facing modern civilization.

"Far out in the desert wasteland of eastern Washington, at the Atomic Energy Commission's gigantic Hanford plutonium works, radioactive elements surge in vast underground tanks -- a pent-up sea of useless energy which is a constant worry to the scientists who unwillingly created it. This deadly broth of fission products is the garbage of the atomic age."⁹

In 1991 there were 111 nuclear reactors in operation in the U.S. producing thousands of gallons of radioactive waste a day. And where does this waste go? The containers are dumped in the sea to eventually corrode and leak out into the water, or buried underground they remain to contaminate our planet for thousands of years. It's also been suggested by experts to send the containers into space, or even into the Sun! Some of the so-called depleted uranium is used for irradiating the food found on our supermarket shelves; some is ploughed into our agricultural lands for use as a 'fertilizer.'

A recent report stated that the bill for cleaning up defense related pollution at government sites in the U.S. alone could triple to *\$12 billion a year* by the year 2000.

NUCLEAR TEMPLES OF DEATH

Standing in gloomy isolation like the temples of some alien and sinister religion, the concrete domes and chimneys of nuclear reactors rise ominously from a once peaceful countryside. With good reason they are regarded with apprehension and fear, especially after the disaster of Chernobyl.

"I am familiar with the feelings of operators at the beginning of an accident," writes Gregori Medvedev, the chief engineer at Chernobyl in the 1970s. "In the first split second you experience a feeling of numbness, of complete collapse within your chest and a cold wave of fright...the needles of the automatic printer drums and the monitoring instruments are swinging in all directions."¹⁰

Nuclear reactors are fuelled with enriched uranium or plutonium which is placed in the core along with 'control rods' made of a material that absorbs neutrons and takes them out of circulation so they will not produce further fission. These rods are manipulated so that just enough neutrons remain circulating to maintain a chain reaction with a multiplication factor of one.

In case of emergency, the rods automatically move deeper into the core, absorbing more neutrons and (hopefully) instantly stopping the chain reaction. Power reactors in the U.S. use water as the moderator (it is the moderator which slows the neutrons down).

Apart from the power reactors are the much more dangerous ‘breeder’ reactors which convert U-238, which is not fissionable, into plutonium-239. In this ironically reproductive jargon, U-238 is called a ‘fertile’ material, in contrast to U-235 and Pu-239 which are ‘fissile.’ In a liquid metal fast breeder reactor it takes about 10 years for the reactor to have enough plutonium to refuel itself, plus fuel another reactor. The breeding must begin with U-235, and it must be a worry to the nuclear industry that if non-breeder reactors use up all the U-235 there will be none left to start the breeding cycle.

In certain breeders, no moderator is used because it is the fast neutrons that convert U-238 to plutonium. Water cannot be used to carry heat from the core as in a conventional reactor, because it would slow down the neutrons, so liquid sodium is used instead. Sodium is an efficient conductor of heat, but it burns on contact with air or water, becomes highly radioactive from the neutron bombardment, and being opaque, makes it impossible for technicians to see what they are doing when changing fuel or other core operations. Cooling becomes more difficult to control and accidents such as a meltdown become more likely than with conventional reactors.¹¹ This ever-present danger is the price we pay for our power, every time we plug into the national electrical grid.

THE URANIUM LANDS

Although it is one of the most sought after substances on earth, uranium is not a rare mineral, in fact it is more abundant than such ‘common’ elements as mercury or silver. But in most rocks the concentration of uranium is only a few parts in a million.

The leading ore reserves are found in the U.S., Canada, South Africa (where uranium is produced as a by-product of the gold industry), Czechoslovakia (the original source of most of the world’s uranium), Zaire (whose reserves are virtually exhausted), Australia and France. Details of the uranium reserves in other communist countries are more difficult to come by.

In the U.S. uranium is mined extensively in the southwestern deserts of Utah, New Mexico, Arizona and Colorado, known as the Four Corners Area. This is land sacred to the Navajo and Hopi Indians who regard its centre at Black Mountain as one of the most sacred places in the world. Their tradition entails a limitless respect for the Great Spirit and for all living beings. Living in harmony with nature is of the deepest value and they direct their prayer ceremonies of song and dance for the balancing of nature in the world. However, these peaceful people have seen their ancestral land so devastated since uranium and coal mining began that they fear the destruction of their religion and even their own lives.

According to the Hopi Prophecy, inscribed on rock and passed down from generation to generation, the Great Spirit had warned that the resources lying dormant there were not to be taken from the ground until humans learned to use them for peaceful ends. Above all, they must never be used for war or destructive purposes.¹²

Little did the Hopi and Navajo know that the uranium used in the atomic bombs dropped on Hiroshima and Nagasaki was mined on their land. But the Japanese were not the only victims. In the 1950s, a total of 119 atmospheric nuclear tests were conducted in Nevada, blasts that lit the skies as far away as Los Angeles. Some 200-300,000 test subjects, U.S. soldiers, were experimentally dosed with radioactive fallout. We can only wonder how many of these 'atomic soldiers' are still alive today.

To carry out their claim for the coal and uranium on Indian land, the government declared it a 'national sacrifice' area and in 1974 the U.S. Congress passed a bill for the forced relocation, literally the cultural genocide, of the people who had lived there for thousands of years. The 'new lands' offered them in return are contaminated by one of the worst radiation accidents in U.S. history, when in 1979, thousands of tons of radioactive water and sludge burst a levy and flooded into the Rio Puerco; this flows into the Rio Grande, which then carries on into the Gulf of Mexico.

Many Navajos had no choice but to work for the multinational companies who did not inform them of the dangers involved in uranium mining. Those working in the mines suffered, and are still suffering, from cancer, severe radiation exposure and respiratory diseases. "I felt as if I had atomic bombs in my lungs," said one miner not long before he died.¹²

The process of extracting uranium dioxide from the ore to produce yellowcake generates large quantities of radioactive waste, as one ton of ore has to be processed to yield just 10 grams of uranium. An estimated 280 million tons of radioactive waste tailings have been left on Navajo land up to 1990. The driving desert winds scatter the powder over a vast area, contaminating the earth, the animals and the people. Many are becoming sick, stricken with cancer and other diseases, and even more ominously, a growing number of women are giving birth to deformed and mentally retarded babies.

But the mining continues. The government has declared this land to be 'eminent domain' and plans to have 1000 mines and 10 processing plants in operation by the year 2000.

THE GREEN ANTS DREAMING

The Aborigines of Australia have also been witnessing the destruction of their most sacred sites by uranium mining, and are speaking out about how the unique energy system that protects and energizes our planet is being destroyed.

They say that when their ancient ancestors came to Earth they created

a circle of pyramids around the planet to protect it from a planetary disaster similar to that remembered in the ancient "Dream Time." They talk about cosmic rays which can only penetrate certain places on earth, cosmic energy which hits the uranium and vibrates out through the circle. If that is interrupted there will be no protection at all for earth.

The story of the Green Ants Dreaming tells of these green ants who live underground in the areas where the uranium belt is. They are considered cannibalistic and must never be disturbed. The Aborigines knew the poison, if allowed to seep up from the ground, would contaminate and kill the people.

But as Lorraine Mafi Williams, an Aboriginal spokeswoman, says, "now the mines have started, they have left huge gaping holes in the ground where the fumes come up. The earth is dead around those mines, there's no life, nothing. When the cosmic beams come at certain times there is no uranium left to receive it."¹³

For people so finely attuned to nature, it is obvious why the uranium must remain in the ground. It performs a vital function in the organism of our planet, and when it is disturbed it becomes a deadly poison. As the Hopi say "...the land is like part of our own body. It is our mother. The energy resources here belong to the earth, they are mother earth's organs. It is necessary for the earth to keep its organs healthy."¹²

This understanding is also expressed in another way by the scientist and philosopher Dr Walter Russell in his book *Atomic Suicide*: "These so-called deadly radioactive poisons are preparing the soil for oxygen dependent life to live by causing countless billions of microscopic explosions in the rock formations underground to release water and other necessities for human life and vegetation...It is only when we dig them out from under the ground and condense tons of harmless rock to ounces of deadly free metal, such as uranium piles, that we make the earth uninhabitable."⁹

THE INVISIBLE KILLER

"Education about the biological effects of nuclear radiation is an absolute prerequisite if the human race is to survive."

Dr Ralph Lapp

What is radioactivity, this silent and invisible killer? It is not the unique property of uranium as generally assumed. Late last century Le Bon demonstrated that "the spontaneous radio-activity of certain substances, such as uranium and thorium... is in reality a universal phenomenon and a fundamental property of matter." All matter is radio-active, all matter emits invisible particles which travel at immense speed, such as alpha, beta and gamma rays, and all matter is in the process of dissociation, becoming transformed into other elements which finally lose their material qualities and return to the 'imponderable ether' as energy.⁶

As another noted researcher Dr T. Henry Moray put it, "through the evolution of matter and the evolution of forces, matter is continuously changing into energy and energy continually changing into matter."¹⁴ They

are, as the ancient alchemists asserted, two forms of one and the same thing.

The particles emitted through radio-active decay describe various stages of the dissociation of matter which becomes more and more subtle as it returns to pure energy. The radio-active process produces an ‘emanation’ according to Le Bon which is “an intermediary between the material and the immaterial... between matter and the ether.” This emanation gives birth to alpha rays, positive ions moving at amazing speed which make the air a conductor of electricity; then beta rays described as negative electrons with a greater power of penetration enabling them to produce photographic impressions; and gamma rays with even a greater power of penetration, said to be similar to X-rays, “and which seem to constitute one of the last phases of the dissociation of matter before its final return to the ether.”⁶

Normally the destruction of matter happens so slowly that it is imperceptible to us, but in substances called radioactive, and artificially produced, such as uranium or plutonium, the dissociation is spontaneous and extremely rapid.

As Russell describes it: “Every thing in Nature dies normally by slowly radiating its heat.” But, “radioactivity is the explosively quick death principle... Atomic fission helps matter to explode instantly instead of decaying over long periods.”⁹ This is consistent with the astrological view of Uranian energies, observed to always accelerate the rhythms of nature.

NIGHT OF THE LIVING DEAD

The highly radioactive metals are dead and decaying bodies that poison and contaminate everything they come into contact with, an unconscious perception perhaps, that inspired such gruesome cult horror movies as *The Night of the Living Dead*. Like corpses these substances belong under the ground, because when they are taken from their natural place and let loose into the world there is no end to the nightmare.

This has been made tragically clear to many people in the world including the people of Palau, whose islands in the Pacific reek of poisonous radioactivity due to early U.S. testing even though the entire topsoil was removed; especially the women who after nine months of anxious pregnancy have given birth to what they call ‘moles’ because these lumps of undifferentiated tissue resemble nothing remotely human, because the land, the water and vegetation are so contaminated. Or certain Aboriginal tribal people who, after the British had carried out their atomic testing in the outback deserts of Australia, gave them rubber boots to wear to protect them from their poisoned ancestral lands.

The cells of the reproductive organs are particularly vulnerable to radioactive elements, especially strontium-90 which causes genetic damage, birth deformities and mutations. Closer to home, a recent newspaper article described the alarmingly high number of male college students in the U.S. who tested as impotent. In a strange circuitous way this echoes the myth of

Uranus, who was rendered impotent by Gaea, the Earth's revenge. From the blood of Uranus mixed with sea foam, the avenging Furies were said to spring, and also curiously was beautiful Aphrodite, the goddess of love.

Russell had said that: "Radioactivity is man's discovery of how the human race can die quickly, and not be able to propagate its kind for many long centuries." He also warned of greater dangers to come. "The greatest radioactive dangers are accumulating from 8 to 12 miles up. This seems to be ignored. The upper atmosphere is already charged with death dealing radioactivity for which it has not yet sent its bill. It is slowly coming, however, and we will have to pay for it for another century, even if atomic energy plans ceased today."

Here again we encounter the ancient Uranus, also known as the Overhanging Heavens,¹⁵ "the generative power of the sky, which fructifies the earth with the warmth of the sun and the moisture of the rain." But now the bright overhanging skies are charged with radioactive clouds falling silently "little by little... in the rain and snow and dew, onto the earth, the rivers and the sea."

Dr Wilhelm Reich also described how the clear desert atmosphere became grey and lifeless, charged with Deadly Orgone Energy immediately after atomic tests.¹⁶ And nowhere is safe. Samples of radioactive strontium have been detected from the snow of Antarctica to alfalfa in the fields of Wisconsin. The Hopi Prophecy also warned of the catastrophic results if uranium was taken from the sacred lands for the wrong reasons.

"So we begin to see more earthquakes, we see changes of seasons, severe winters, severe droughts, or maybe big winds killing people and destroying property, and great flooding by rain, and maybe mountains blowing their tops, and land sinking, and then towards the last lightning starts hitting people because we have not followed the law of the Great Spirit...We now stand at the final stage as predicted by the Great Spirit."¹¹

The facts speak for themselves. Earthquakes, floods, droughts and major storms...they are all on the increase as even a casual observer of news reports cannot fail to notice. At least 15 million people are expected to die of starvation and disease in Africa over the next year due to drought. Underground nuclear testing contaminates the vast underground aquifers beneath the desert, and although scientists say 'there is no connection' swarms of earthquakes shake the planet within days, even hours, of these gigantic chthonic blasts. There were more earthquake deaths reported in 1990 than during the whole of the 1980s. A fascinating book *H-Bombs Have Us Quaking* details the major earth movements following the atmospheric tests of the 1950s. With good reason the author calls nuclear power "the scientific religion of death."¹⁷

ALCHEMY AND THE SHADOW SCIENCE

The ancient alchemical tradition with its metallic and planetary

correspondences is a profound science of transmutation, concerning both consciousness and substance, describing life and death and the renewal of life as a continuous metamorphosis. But while this noble science seeks the healing elixir of life, the debased shadow science of nuclear technology has brought misery and death to the planet, and casts a shadow upon our children and their descendants for thousands of years to come.

The end product resulting from the decay of uranium is lead, while alchemy begins with lead as the ‘base’ metal which is purified and ultimately transmuted into the gold symbolic of spiritual perfection. The discovery of uranium and its subsequent use in warfare and nuclear technology has irrevocably altered the course of human evolution. A gateway has opened into the abyss and humanity balances precariously on the edge.

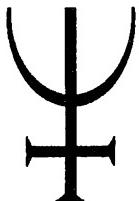
In the occult Qabalistic tradition, the planet Uranus is attributed to the 11th sphere on the cosmic Tree of Life, the ‘false’ sephirah called Daath, and the Gate of the Abyss. Here is the knowledge of death, a sudden and explosive knowledge as the blackness of the abyss is lit with the lightning flash of illumination.

Daath is the ghost, the shadow of reality, as occultist Kenneth Grant writes; it is the place of crossing-over or “reversal to the source of Non-being... Daath being the Gate of the Abyss is the point both of ingress into noumenon and of egress into phenomena; in other words it is the gateway of the manifestation of non-manifestation.”¹⁸

Here lies the secret of duality sought by etheric scientists such as Le Bon, who showed “that matter is not eternal, that it constitutes an enormous reservoir of forces, and that it disappears by transforming itself into other forms of energy before returning to what is, for us, nothingness.”

The sphere of Uranus corresponds in the human body to the subtle energy chakra called Visuddha in the region of the throat. It is the source of the Word, “the creative power of the mystic Sound that, according to the old tradition of India, pervades all spaces,” a concept echoed in the words of Moray, who wrote: “There, at its very foundation, matter consists of an electric charge which governs the very motion of the planets and suns. I consider gamma rays or radioactivity an electrical action only of a different rate of vibration. If one, therefore, sets up a sonic oscillation, a sonic oscillation existing in the realms beyond the light rays, one will be in harmony with the oscillations of the universe, the energy which is coming to this earth continuously, oscillating back and forth in a definite sonic.”¹⁴

The highest Uranian sciences show clearly that the infinitely small particles of matter obey the same universal laws from atomic space to planetary and stellar space. As human consciousness reaches further out into the distant regions of the solar system, we encounter new streams of cosmic energies, alien radiations from the deepest abstractions of space...and whether we are aware of it or not, we too are transmuted, and changed into a new form of life.



NEPTUNE'S PRIMORDIAL OCEAN

*“..this deep and endless source of magickal imagination
and gnostic consciousness.”* H. F. Jean-Maine

Something was perturbing the motion of the newly discovered planet Uranus; all indications pointed to the existence of another planetary body, but so distant from Earth as to be almost invisible. The French astronomer Urbain Leverrier calculated the position of this unknown planet and his predictions coincided with those of a young English mathematician John Adams. By 1845 both were able to predict where the 8th planet might be found, but an official search was plagued by delay and frustration. Leverrier eventually had better luck and a search by the Berlin observatory found the faint greenish star-like object on September 23, 1846, so distant that “trying to see details of Neptune from Earth is like trying to see details on a quarter from a distance of a mile.” For the first time a planet was discovered by applying mathematical theory rather than observation through a telescope; suddenly the solar system had expanded tremendously.

After Voyager 2 flew by Neptune in 1989 millions of people across the world experienced the wondrous sight of this distant world for the first time, with its deep aqua blue methane-rich air and system of tenuous rings. Also revealed was the Great Dark Spot in Neptune's atmosphere as large as Earth itself and similar to the red spot on Jupiter. Close-ups of the satellite Triton exposed a frigid surface (-236°C), looking somewhat like the skin of a cantaloupe. Nereid and other newly discovered moons complete the picture of Neptune's mysterious family.

The confusion and controversy surrounding this planet's discovery is typical of Neptune's character. Named after the Roman god of the sea, Neptune symbolizes the subtle and ever-shifting ocean of energy which lies beyond the world of appearances. In this respect Neptune is 'outside' the traditional system of correspondences which connect the inner planets with

specific metallic substances on earth. Instead, “Neptune tunes one into the reality of the unseen, immaterial forces of life.”

Just as the ocean dissolves all elements into itself, so the formless and boundless Neptune dissolves away all limiting structures and conceptions, all distinctions between energy and matter, between spirit and body. With Neptune we are dealing with a force “...beyond the fringes of reason or of anything comprehensible to the logical mind.” We are touching on the mystery of life itself, the giver of inspiration and mystical visions, shunned by the sane and rational scientist who is endlessly concerned with cataloging, classifying, categorizing, imposing fixed, exact facts, limits and boundaries.

This boundless ocean of primordial energy which gave birth to all form, is an image common to all ancient mythologies. In the Egyptian tradition the god Nu was conceived to be the deep and watery mass from which primordial matter arose. The goddess Nuit was his creative counterpart, containing and giving direction to this primal energy. The letter-sound N ////////////// with its undulating ‘electrical’ waves is the hieroglyph for the primary water-energy, “...for original Energy is like still water which, under impulsion, manifests itself in waves and these, growing as they go, carry the energy from centre to circumference.”¹

Thousands of years later this image still remains with us... Theodor Schwenk writes: “Natural philosophy in the time of Goethe and the Romantic movement still gave water its place as the image of all liquids and the bearer of the living formative forces. People experienced the fluid element to be *the* universal element, not yet solidified but remaining open to outside influences, the unformed, indeterminate element, ready to receive definite form; they knew it as the “sensitive chaos.”²

This primordial energy, imbued with ‘living formative forces’ has also been called the *Aethyr*, or the *ethers*, among other names, the focus of great interest for researchers outside the mainstream of modern science. Here in the invisible realm of the ethers the esoteric knowledge of the past and natural science coalesce.

Much has been written on the ether, but little finds its way into mainstream scientific journals. Following here is a brief history of the ether concept; as Sir Oliver Lodge called it, this “universal and possibly infinite uniform omnipresent connecting medium.”

According to physicist and borderland researcher Carl F. Krafft: “The existence of a single universal substrate for all different substances has been vaguely suggested in the Homeric poems, dating as far back as the ninth century B.C., in which doubt was expressed as to whether there were really as many different kinds of matter as the endless variety of substances that we find in nature. In the Homeric poems, and also in the subsequent teachings of Thales during the sixth century B.C., water was considered to be the universal substrate from which all other substances were produced. Although water is definitely not the ether, still the underlying thought of having a

universal substrate is almost as old as recorded history itself, and it is therefore not surprising that the relativists have not been successful in their efforts to abolish the ether.

"A closer approach to the modern ether theory was made by Anaximander (611-547 B.C.), a pupil and successor of Thales. Anaximander did not recognize water as the primary substance, but postulated a substrate, namely the 'Infinite,' which he described as being more rarified than air and different from any of the elements, but from which all elements (namely, air, water, fire and earth) were produced, and to which these elements would return when destroyed.

"Anaximander's Infinite was commented on by Aristotle with the remark that 'it is not necessary to prove that the Infinite should actually be matter that sense can perceive,' and similarly we are today told of the ether that is not a form of matter that we can perceive, but is nevertheless the source of all subatomic particles of which matter is composed. Anaximander declared that the Infinite is in perpetual motion, and that if its motion ever ceased, the world would cease to exist. This is nothing else than a paraphrased version of the modern ether theory with its vortex protons, electrons and neutrons which owe their very existence to their motion."³

Some early researchers have related the properties of ether to electricity, such as Dr T. Henry Moray who wrote: "Where ether ... is quiescent, we see nothing. Light causes vibrations of this 'ether' and it is these vibrations which cause our eyes to detect. All substances are really combinations of one primordial substance, i.e. electricity, or, in other words, electricity is specifically modified ether."

He went on to say "...all space is saturated with energies which are doubtless electrical in their ultimate energies or very closely allied to electrical action. The relation of matter to energy and energy to matter then becomes the potential of the universe, one continuous series of oscillations, oscillating to and fro like a great pendulum across the universe."⁴

Some of the most comprehensive descriptions of the ether in modern times come from the teachings of Dr Rudolf Steiner and his followers. He defines seven etheric forces, with only four manifesting in the phenomenal world, the ancient elements of fire, water, air and earth, which he gives the names warmth, light, chemical (or tone) and life ethers. These four ethers are described as the carriers of the formative forces from the supersensible spiritual world above. Below these four ethers lies the sub-material world, the realm of electricity, magnetism and nuclear forces. Far from being the vital substance of life, Dr Steiner called electricity a 'fallen' or 'corrupted' ether.

It's a curious fact that the discovery of Neptune coincided with great advances in the electrical sciences, paving the way for the vast network of electronic technology that our civilization has become totally reliant upon. But as electricity became the dominant force and source of energy, the

ancient concepts of the ether with its spiritual qualities were abandoned by all but a handful of dedicated researchers, the heretics of modern science.

Among those were the practitioners of various healing arts who extended their perceptions into the etheric and demonstrated its reality in a very practical way, for example, the Radionic instruments and Radio-Vision photographs of Dr Ruth Drown. Echoing the ancient wisdom she repeated many times: “There is but One Life, One Substance, and One Energy! All the phenomena are only precipitates of the one energy functioning at various rates of vibration... The Drown Radio Therapeutic Instruments are a means used to catch and hold a certain amount of the Life Force of a patient being treated... In its greater sense, the Life Force is a Light which passes through sublimation into a form of energy, then down to gases, and finally is condensed into liquid, in which state it flows over the nervous system and through the blood vessels. From this phase it crystallizes into form.”

With her Radio-Vision Instrument Dr Drown could take photographs of her patients anywhere in the world. As she said, “the vibration of everything in the world is *where we are*; we need only take it out of the ethers and pass it through our instrument in order to treat a patient at a distance, or make a picture of any part of his body.”⁵

Around the same time, during his remarkable bion experiments, Dr Wilhelm Reich was also discovering the universal life energy, a primordial mass-free energy which he called “orgone.” He called this energy orgone, as Trevor James Constable writes “...to identify it permanently with things organic, with the orgasm and with life. He proved its existence visually, thermically, electroscopically, and later on, at the Geiger-Muller counter and by illumination in vacor tubes.”⁶

Mark Gallert describes it further... “The indications are that orgone energy is everywhere, throughout all space, and that it pervades even the so-called ‘vacuum.’ It would seem that orgone is, in reality, the cosmic ether for which scientists searched so diligently several decades ago....Dr Reich’s term for the ether is the “orgone energy ocean.”⁷

Constable, a true pioneer in the etheric sciences, has expanded far beyond the original workings of Dr Reich and has dramatically demonstrated the reality of the ethers with his many successful weather engineering and smog reduction experiments.⁸ He has also supplied the theoretical link, based on empirical observations made during experimentation, between Steiner’s etheric forces and Reich’s orgone energy.

THE SPIRITUAL ETHER

“Those who for some reason dislike the word ether, scatter mathematical symbols freely through the vacuum, and I presume they must conceive some kind of characteristic background for these symbols. I do not think anyone proposes to build even so relative and elusive a thing as force out of entire nothingness.”

Sir Arthur Eddington

If the existence of this primordial life energy has been so well established, why is science determined to ignore it? The problem with the ether concept is that it crosses all the boundaries that have been so painstakingly drawn between the spiritual and the material worlds. Science would rather spend billions of dollars looking for some hypothetical sub-atomic particle that may have once existed than entertain the possibility of a living energy imbued with the qualities of soul and spirit. For god's sake, leave life out of the equation!

Science can measure all the parts of a rose, even dissect it and describe the separate bits, but it can't even begin to convey the rose's beauty, its perfume, its effect upon the soul. Science is no longer concerned with quality, with essences, with the whole. It has locked itself into a narrow dark world of mental abstractions, even though the scientists themselves still dream, fantasize, have sex, feel beauty and love (or do they?) While science and art were once synonymous, now there is the greatest contempt of one for the other, an abyss between what we feel and what we are given as 'facts.' By removing spirit from substance science has given us a dead world, purely mechanical and devoid of meaning.

On the other hand, spiritual science emphasizes that the "ether has not only quantitative but also qualitative characteristics, the latter of which can by no means be separated from the former -- that is, supersensible, spiritual characteristics."⁹

The idea of spirit and matter being two independent and separate realities is only a relatively new concept promoted by Descartes and others who were persuasive mouthpieces for the 'dry rationalism' that spread and became deeply entrenched throughout the western world. For people of earlier times this fractured world-view would have been regarded as a strange mental aberration. How could matter and spirit be separated when they were twin aspects or poles of one divinity? "Matter was still regarded as the 'mater', the motherly element, in which the spiritual forces of the universe were embodied."¹⁰

This direct contact of the individual with the spirit world, without an intermediary, was anathema to the early Christian church which as it gained power sought to stamp out all traces of the old life-based religions. Neptune's trident, through which the powerful torrents of the life-force surged, became the devil's tool and an arch-symbol of evil.

Describing the early alchemists, who were forced to go underground to save their skins, Aleister Crowley wrote: "They always begin with a substance in nature which is described as existing almost everywhere, and as universally esteemed of no value. The alchemist is in all cases to take this substance, and subject it to a series of operations. By doing so, he obtains his product. This product, however named or described, is always a substance which represents the truth or perfection of the original 'First Matter'; and its qualities are invariably such as pertain to a living being, not to an inanimate

mass.”¹¹

The alchemists called the ether a *materia* or *quintessence*, which forms the basis of the four elements, fire, water, air and earth. But the soul is also referred to as the primordial *materia* of the spirit, and all souls are said to be made of this one substance.

A parallel is found in Tibetan Buddhism where the four elements of nature correspond to the psychic centres in the human organism; the root centre at the base of the spine corresponds to the element earth, the navel centre to water, the heart centre to fire, the throat to air, and the centre on the crown of the head to the element ether. As consciousness unfolds through these psychic centres and reaches its height “the dark seed, containing the essence of the universe...breaks open and bursts forth into the dazzling flame of enlightenment.” This “flaming drop” signifies the element ether, (or space, in its passive aspect), and its Sanskrit term is *akasa*. To quote Lama Anagarika Govinda: “The active aspect consists in the idea of an elementary vibration of point-like, infinitesimal units of invisible energy penetrating the whole universe... Thus *akasa* is all-pervading ether and all-containing space, the synthesis of all that exists, and therefore the symbol of the essential unity of cosmic, psychic, and physical energies.”¹⁰

Light and motion have always been mentioned in connection with the living ether. Around the 5th century B.C., Heraclitus described the ultimate substance as the “Fiery Ether” or “Divine Fire” and he interpreted it as both primitive matter and divine intelligence, or “world-ruling wisdom.” It was the essential substance of both matter and soul.

“Spiritual and corporeal are simply terms which express the degrees of tenuity or density in substance,” the famous occultist Eliphas Levi wrote, describing the “impalpable omnipresent ether” as a universal or fluid agent, and also as the “primordial light, which is the vehicle of all ideas ...the mother of all forms.” In combination with extremely subtle fluids, he said, this Astral Light forms the Ethereal Body.¹²

LITHIUM – THE ETHERIC ELEMENT

Although Neptune by its nature defies any rigid classifications, there is one metal that has been associated with this planet in esoteric writings -- lithium, the lightest metal known. After the gaseous hydrogen and helium, lithium is the first solid on the Periodic Chart.

Described as a “white non-metallic metal” lithium is a powdery substance always found naturally combined with other elements. It was discovered by the Swedish chemist John Arfvedson in 1817, 30 years before the discovery of Neptune.

Lithium has been called the gateway between mind and matter and is especially connected with the pineal gland. In her book on this element Haroldine calls it “the primary structure foundation base of all other matter in solid form... Sometimes referred to as an ETHERIC ELEMENT...lithium

is the main connection from etheric on into the physical plane and controls the primary formation of human life via our nervous system -- the 'entrance in' so to speak. The 'entrance back out' is adequate lithium supply in system to allow the natural opening of 3rd Eye -- our pathway to higher consciousness.”¹³

In the body lithium is a necessary ingredient for the building of cell walls, and in the sheaths covering the outgoing nerve endings. It has a strong connection with the spleen and immune system “the chief communicator between body and mind,” and is deeply involved with the mysterious process of transmutation of bioelements in the cell nucleus, particularly potassium, sodium and beryllium.

Displaying its affinity with Neptune’s fluidic energies lithium reacts vigorously with water, and its compounds display an incredible ability to absorb water, a property that is put to use in air purifiers, respirators and air conditioners. Constantly filtering through into Earth’s atmosphere Haroldine describes interplanetary lithium as “the essence/ether form carrying water to the Geosphere.”

Lithium has a tremendous range of application in today’s world; from therapeutics to thermonuclear technology. Its unusual nuclear and electronic properties give it a great diversity of uses in industry. A lithium isotope serves as nuclear fuel in lithium reactors, and in the rocket and aerospace industry a compound containing over 50% lithium is used for solid rocket propellant. Lithium alloys have many valuable uses in the metal industry. One lithium-magnesium alloy is lighter than water, another remains untarnished by time. Lithium is used as an industrial catalyst, in battery electrodes, as a base for machine lubricants, in the ceramic industry. Lithium-modified glasses have valuable optical properties, and telescopes with lenses made of lithium fluoride are of the highest quality, enabling astronomers to see even deeper into the vastness of space.

The remarkable healing qualities of lithium have yet to be fully explored, whether used in its natural crystalline form, or in lithium compounds which are prescribed for schizophrenia and manic-depression. However, recent reports have shown that lithium compounds used in medicine have a much lower success rate than previously thought and often produce severe side effects. While natural lithium, such as found in mineral springs, is highly regarded for its therapeutic value and people in areas fortunate enough to use this water are reported to have a significantly lower incidence of mental illness.

The dissolving and emotional qualities of Neptune are especially revealed in the balancing and healing properties of the various natural lithium crystals which, as Haroldine says, “act as a non-invasive method of achieving balance for the individual by removing barriers and blocks from the physical body wherein all incompletely emotional trauma is stored.”

NEPTUNE'S "DIVINE DISCONTENT"

Inspiration, imagination and intuition are the words given by astrologers to describe Neptune, ruler of the watery sign Pisces and the mysterious 12th House. Everything Neptune touches it refines and sensitizes. Often referred to as the love of Venus on a higher level, Neptune tunes us emotionally to higher and more subtle levels of feeling. It serves to awaken the spiritual nature, urging us towards other states of consciousness.

This visionary quality of Neptune relates to the pineal gland where the animating light or life force enters the body. When activated it opens the Third Eye, the organ of clairvoyance, enabling us to perceive the ocean of energy in which we live, the rhythms and currents of the subtle etheric web. So Neptune naturally rules mediums, psychics, occultists and healers, opening up a direct connection to the spirit world.

All drugs, alcohol and hallucinogenic substances are under Neptune's influence, anything that frees the imagination from Saturn's earthbound grip. It's interesting to note that tobacco, the sacred Native American herb, contains appreciable amounts of lithium. From the most ancient times Neptune has inspired the use of psychedelic potions, magic mushrooms, cacti, and flying ointments. Every culture has its own traditional mind-altering substances including such Neptune-activated drugs as LSD which thrust a whole generation directly into the etheric ocean.

Both madness and illumination lie in Neptune's dreaming depths from which the artist brings vision to film and poetry, inspiration to all forms of art, dance and music. It is the essential quality of art and music to speak directly to the heart, to lift our spirits and transport us into other worlds. Again lithium, showing its relationship to Neptune's subtle universal energies, is said to have a "fundamental harmonic that resonates with every note of the musical scale."

But when inverted Neptune becomes the instrument of delusion and deception. Unless the individual is well-grounded in Saturn's hard reality before 'spacing out' there is always the danger of becoming psychically devastated, to be cast adrift into an ever-shifting sea of delusory images as the ego is dissolved in Neptune's boundless ocean.

THE COSMIC STIMULUS

Powerful and naked, with his thick hair dishevelled, the sea-god Poseidon rides his chariot over the surging waves with his wife Amphitrite, the Nereids and other dwellers of the sea. At other times he stands on the water, swinging his trident and gazing out across his domain. Far below, hidden in the ocean depths lies his golden palace.

Early on, the Greek god Poseidon was identified with Neptune. With his trident lashing the sea into fury, he split the rocks causing horses and fountains to spring from them, but while he caused storms and shipwrecks he was also known as "The Preserver" and "supporter of the earth"; sailors

and every occupation dealing with the sea were under his protection and temples were erected on headlands high above the waves in his honour. Horses and dolphins were especially sacred to him, and black bulls symbolic of the stormy sea were thrown alive into rivers to placate him. He was a lusty god carrying on numerous affairs with nymphs who bore many offspring, often wild and cruel.

We can only wonder how the massive pollution of our rivers and seas is affecting Neptune and his oceanic family. Do the Nereids still play in waters choked with plastic and miles of abandoned drift nets? Do the sirens still sing on slimy rocks above the splashing of raw sewage and industrial waste? And what has caused Neptune's energy to turn against itself? Oil, sacred to Neptune, is now a major pollutant -- with new spills reported like clockwork. Will Neptune raise his trident and send even greater storms and tidal waves to punish the desecrators of his sacred oceans?

Neptune's three-pronged tool is also carried by Shiva, the Hindu god of ecstasy and dissolution. In the Qabalistic tradition Neptune's phallic symbolism is attributed to Chokmah the second sphere on the cosmic Tree of Life. Called "Wisdom," and "the illuminating intelligence," Chokmah lies above the Abyss, above and beyond the world of form as "the dynamic force of life, which is spirit, that ensouls the clay of physical form." It is "formless, being the pure impulse of dynamic creation; and being formless, the creation it gives rise to can assume any and every form."¹⁴

It was this cosmic force the ancient pagan traditions celebrated with their phallic worship and ecstatic ritual. Dance, chanting and music, all of these aspects of magical ritual belong in Neptune's sphere, and the ritual patterns, mandalas and talismans formed under astral and etheric influences. In the sophisticated cosmology of Haitian Voudoo these ritual designs or vèvès are described as "condensers of astral forces and ritual attractors of planetary powers."¹⁵ Traced on the ground with flour or cornmeal the geometrical patterns of the vèvès give visible form to the etheric currents, attracting the astral planetary fluids and spiritual influences which the designer 'captures' in order to accomplish the magical work.

Although the symbolism relating to Chokmah is generally phallic in nature there is an ever-fluctuating polarity within Neptune's boundless ocean; neither purely masculine or feminine but a continuous merging of one into the other.

According to Robert Graves, Poseidon originally had nothing to do with the sea and only acquired his rulership over the waters when the sea-goddess Amphitrite, the "all-encircling triad," was forced into marriage with him. Pallas Athene, the Greek goddess of wisdom attributed to this sphere, was also originally a sea-goddess.

Even earlier, long before the Greeks formed their patriarchal hierarchy of gods, the trident signified the triple goddess of the new, full and waning moon worshipped throughout the Celtic world from pre-historic times. She

was the Mare-goddess, the triple-Muse, inspirer of poets and bards, and the guardian of natural springs from which her creative power was conceived to flow. A deep understanding of her lunar and etheric rhythms was vital for the success of all magical operations.

Perhaps more than any other occult symbol the trident represents the plunge into the deepest levels of the unconscious mind to where Neptune's golden palace is concealed, the secret place of crossing over into the world of spirit. But this point of crossing over, or reversal from the known to the unknown worlds, is guarded in all traditions by frightening and wrathful deities such as the "mighty demon" called Choronzon. Occultist Kenneth Grant refers to this entity as a corrupted form of Chozzar, the ancient god of Atlantean magic, an earlier form of Neptune symbolized by "the triple-tongued flame of spirit." As the Guardian of the Deeps, this fearful entity watches over the ultimate gateway through which extra- or ultra-terrestrial contact is established. This is the nature of the "hidden" or "forbidden" knowledge of Chokmah, forbidden because it points the way of access to other, non-human dimensions.

Neptune's sacred dolphins are symbolic of this other world contact, a memory of the half-human half-fish deities worshipped in the most ancient times, sea beasts such as Dagon and Oannes who were said to have come from distant star systems to give their knowledge for the evolution of the human race.

In modern times, the resurgence of interest in the etheric sciences has also coincided with an immense fascination for UFOs and alien contact. Back in the 1940s and 1950s Meade Layne, the founder of Borderland Sciences Research Foundation, wrote extensively about flying saucers (or ether craft) as coming from the etheric worlds which interpenetrate our own world of matter.¹⁶

In his extraordinary book *Contact With Space*, Dr Reich also documents the appearance of UFOs during his cloudbusting experiments involving the orgone energy ocean. The contact was overwhelming in its implications, and led many of his more orthodox followers to believe that he had gone insane. But as Reich himself wrote: "Earthmen had encountered space as it really was; not as science had conceived of it heretofore... I knew, we had without intending it, drilled a hole, as it were, into the wall which had for millenia separated man from the universe around him."¹⁷

The mysteries of Neptune take us far beyond any rational explanations or comfortable conclusions. What begins as a simple exploration of the etheric worlds becomes an ever extending journey into the infinity of spirit. While certain of its qualities and processes can be described, the ether itself ultimately remains elusive and indefinable; it can only be experienced and understood by developing the higher organs of perception. To attempt to harness or manipulate the ethers without understanding the spiritual forces they embody is to fall into the same blind trap of our present materialistic

science. But the future scientist like the alchemist of old will know that the transmutation of matter and consciousness, in the hyperphysical space of the ethers, are one.

As Eliphas Levi said: “The Great Magical Agent, by us termed the Astral Light, by others the soul of the earth, and designated by old chemists under the names of AZOTH and MAGNESIA, this occult, unique and indubitable force, is the key of all empire, the secret of all power.”¹²



PLUTO

And Beyond

"Out of death in nature life springs." Walter Russell

As Pluto orbits in its wide sweep the remote reaches of our solar system it encompasses all of the other planetary bodies within its sphere. They are all touched with Pluto's influence, the outermost, enigmatic wanderer.

Astronomers have little to say about Pluto, so distant it is a thousand times fainter than its nearest neighbour Neptune, so small its diameter is estimated to be only 1400 miles, about the size of Mars. The great distance of Pluto, at its maximum orbit around 4,600,000,000 miles from the Sun, gives it a year equal to approximately 250 Earth years. Thought to be coated with a surface of methane ice Pluto is, in comparison to our warm and sunny Earth, a remote and shadowy glacial world, an infinitely strange and lonely outpost receiving and transmitting the solar and galactic forces.

Although the astronomer Percival Lowell is generally credited with the calculations leading to Pluto's discovery in 1930, it was an employee at the Lowell Observatory named Clyde Tombaugh, an amateur astronomer, who spotted the tiny moving star-like object in a series of photographs taken of the night sky. But the true nature of Pluto only came to light in 1978 when James Christy of the U.S. Naval Observatory discovered a large orbiting satellite, half the size of Pluto itself and twenty times closer to Pluto than our Moon is to Earth, which he named Charon. Scientists speculate through spectroscopic analysis that Charon, unlike Pluto, is covered with a surface of water ice. Together these mysterious twins are locked in rotation, turning their faces forever towards one another "like two dancers who spin one another around an invisible center."

As the only binary planet we know Pluto is unique in our solar system, but its orbit is also quite unusual being more markedly elliptical than any of the other major planets. The orbital planes of all the other planets lie within 7° of the plane of the Earth's orbit, called the 'plane of the ecliptic,' but the orbit of Pluto is inclined 17° to that plane. In comparison, the plane of Uranus

is less than 1°, the closest to that of Earth..

During its innermost orbit Pluto swings in closer to the Sun than Neptune, a rare event and one we are now witnessing as Pluto moved into this position in 1978 (the year of Charon's discovery) and will remain there until 1999.

THE PLUTONIAN FACTOR

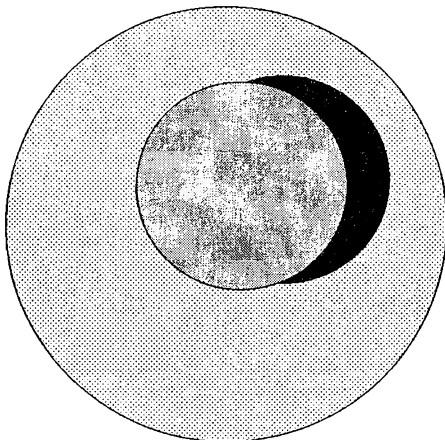
Since Pluto's discovery astrologers have been greatly interested in defining the nature of its influence, both on an individual and on a planetary level. Through studying countless birth charts a picture of the Plutonian character has emerged, but like the planet itself there is an unfathomable quality to the Plutonian forces.

"It seems there is always something hidden about Pluto," astrologer Stephen Arroyo writes, "something subtle and difficult to conceptualize in ordinary logical terms... Pluto always symbolizes a form of *extremely concentrated power*. This power is so intensely concentrated that the physical shape or size of Plutonian phenomena (like the planet itself) is irrelevant...although smaller than the Earth, its "influence" affects life on Earth in a proportion far greater than its size would indicate."¹

Described as a tremendous force for transformation, Pluto represents processes that are essentially unseen and unconscious, operating at a level hidden deeply beneath the surface of life. Although discovered and named so recently, it is curious to see how closely Pluto's nature is allied with the deity after whom it was named. In magical traditions it is believed that the power of a thing is contained in its name, that to use the true name of something is to invoke its power, which makes one wonder how strongly the naming of a planet affects the influence of that sphere on life and human consciousness. If the planets had been given different names, would different forces have been invoked, with correspondingly different effects on Earth? Although this seems a far-fetched idea, consider the fact that the gods ruling the planets since Græco-Roman times have been a predominantly male hierarchy witnessing, and also helping from their lofty abode, the rise and entrenchment of powerfully patriarchal religions across the world, hostile to any expression of female spiritual strength. Only two goddesses are admitted to our planetary pantheon -- Luna and Venus -- the others, on the whole, are named after warring kings and jealous tyrants. Mercury alone is ambivalent, the androgynous one. If the planets had been named instead after goddesses of ancient power, would there have been a corresponding elevation of the female principles, a reverence towards the beauty and life-giving power of Nature instead of the destruction, fear and violence which characterize our times?

In Greek mythology Pluto was the fierce and inexorable god of the underworld, ruler of the invisible universe, the 'nether' or 'other' realm which lies beyond the world of the living. According to this story Pluto seized

Charon casts its shadow over Pluto in this graphic representation showing approximate size and distance ratios.



the goddess Persephone and carried her off to his lower world to live for six months of every year, a myth closely connected with the growth and fertility of corn and the vegetation on earth, as both Persephone and her mother Demeter were ancient corn-goddesses symbolizing the mysteries of birth and death, the cosmic rhythms of the seasons, of light and darkness.

"Pluto can be said, in one sense at least, to symbolize the seed falling into the humus made of the dissolved and chemicalized remains of the ending cycle of annual vegetation (the product of a Neptunian process of dissolution)," astrologer Dane Rudhyar comments.¹

Buried deeply within the earth the structure of the seed is destroyed to give birth to a new form of life. Its roots remain forever in the dark spaces of the night but its sprouting leaves are drawn upwards to the light and warmth of the Sun. Likewise the physical body at death decays and returns to the earth but the soul, on entering Pluto's darkness, is ferried by Charon the boatman across the river Styx, and passes through the underworld into the light of the spiritual Sun.

Being the regents of the lower world Pluto and his queen Persephone also control all of the treasures found underground, especially the metals whose source lies in the dark womb of the earth. Mined and extracted, smelted and cast, Pluto's treasures have been brought into the world and created our civilization. Without these gifts of Pluto there would have been no bronze or iron age, no industrial revolution, no sophisticated technology as we know it. But do we ever stop to wonder where the metals we take for granted come from, of the chain of events that brings iron, for example, from one part of the world to be processed in giant steel mills in another part, and passing through further factories and countless hands reaches the store where we exchange more metal in the form of money for the final product. If by some chance the source of our metals vanished, if we could no longer obtain

anything made from metals, our way of life would be totally transformed -- almost overnight we would find ourselves returned to live in a new stone age.

“THE TRANSFORMER”

From the mid-1980s to the mid-90s Pluto is not only in its closest orbit to earth but is also passing through Scorpio, the zodiacal sign it rules, a time remarked upon by astrologers as a period of crucial and revolutionary changes both in human consciousness and in the structure of the planet itself.

In the power of the sacred substances hidden underground which evolve and grow according to their own laws, Pluto's dual nature of transformation is expressed. “The ancient miners who brought metals up out of the earth and treated them in their furnaces thought of the metals as seeds planted in the earth by gods,” writes Michael Jones.² But while metals have been used with reverence throughout history to create tools and implements useful to humanity, objects of beauty, art and worship, these precious substances have also served to place fabulous wealth in the hands of a few select cabals.

While individual artisans still honour the beauty and soul nature of the metals with which they work, the vast multinational corporations who now control most of the mining operations throughout the world no longer have any regard for the spiritual qualities of the metals. For them these “condensations of the stars” exist purely for personal profit and power. It is not surprising then that Pluto is found to be a strong influence in the birth charts of bankers, powerful industrialists and politicians, the corporate gangsters who are mainly responsible for the stripping and poisoning of Nature, adept at the manipulation of public opinion while keeping their own motives well hidden.

It's interesting to note in passing that Pluto's discovery coincided with the first television transmissions by Philo Farnsworth, an invention that has transformed the world perhaps more than any other during this century. What a tremendous tool for education and creative adventures it was first thought, until the authorities also recognizing television's revolutionary potential, took control and turned it into a vehicle for propaganda and mindless violence.

But while the Plutonian shadow masters scheme and plot for ultimate global power, other forces are stirring, elemental forces which are far beyond even their control.

Deep in the earth beneath our feet Pluto's passing is marked by increasing seismic activity as tremendous chthonic powers build up in the movement of vast tectonic plates to discharge unpredictably in earthquakes and volcanic eruptions. Ancient prophecies warn of catastrophic events to come, of earthquakes tearing the land apart, submerging whole continents and pushing up new land from the ocean floor. Ancestral memories of Atlantis and Lemuria linger to haunt the imagination, of ancient upheavals

that destroyed most of the Earth's inhabitants and sent the survivors to live in subterranean caverns. There is an underlying tension and unease in the world of Nature, an increasing apprehension of the damage that humans have inflicted upon the planet. How much more abuse can the organism of the Earth tolerate before it begins to die?

As 'the transformer' Pluto destroys the old, the outworn and outgrown to make way for the new, "tearing through any blockages to evolutionary growth and demanding change when its tremendous creative potential is resisted. Its influence is seen in the sign Scorpio, in the hidden processes of sex, death and regeneration, the unseen mysteries in the world of nature and spirit, described in the *I Ching* as "the mysterious place where all things begin and end, where death and birth pass one into the other."

On a personal level Pluto compels us to confront our deepest desires and fears, the atavistic forces and memories of the past that are a deep and driving influence behind our actions; the fear of death and what lies beyond. Death is the forbidden subject for Westerners, even more so than sex. It is dangerous and irrational and may force us to look into the unknown from which we came, and into which we will all return.

While the ancient traditions taught a thorough knowledge of the death process and the future life of the soul as shown, for example, in the *Tibetan Book of the Dead* and the Egyptian *Book of the Coming Forth By Day*, such knowledge is abysmally lacking in modern religion. When someone dies the vultures gather, to claim the body for the sanitized mortuary, and the soul for heaven or hell. While the Egyptians provided a system to guide the souls of the dead through the labyrinth of the underworld, there is no way out of the Christian hell. But with a knowledge of the actual process of death, through all the stages of dissolution and detachment from the material, etheric, astral and other more subtle bodies, the soul is consciously aware of its own transition into the spirit world. With knowledge the fear of death dissolves, and it becomes easy to understand why our ancestors celebrated birth and death equally with joy.

With Pluto's passage the taboos of the old order which have served to bind the soul into a rigid and artificial morality and dependence on external authorities are breaking down, and in the deeply ingrained taboos surrounding sex and death are found potent keys to the occult knowledge and power which lies beyond orthodoxy, a knowledge which is based not on dogma and superstition, but on a direct perception and understanding of Nature's cycles.

ANCIENT OF ANCIENTS

On the Qabalistic Tree of Life Pluto is attributed to the first cosmic sphere called Kether, the Crown, and "the Hidden Intelligence," but rather than a sphere Kether represents the ultimate *point* of power which emerges from the primal chaos. Described as "the intensest form of existence, pure being unlimited by form or reaction... underlying, maintaining, and condi-

tioning all," Kether is also "the abyss whence all arose, and back into which it will fall at the end of its epoch."³

"Pluto represents the outermost power-zone, the pylon set at the utmost rim of the planetary system beyond which stretch the vasts of Outer Space," occultist Kenneth Grant writes. "When applied to the microcosm (the world of human consciousness) Pluto represents the pylon at the gates of the sanctuary of Inner Space. Kether, the Crown of the System in the Outer and in the Inner, is thus equivalent to the Height (and Depth) of physical and psychological space....It is the ultimate gate to both Outer and Inner Space."⁴

As the most intensely concentrated point of cosmic power, Pluto signifies the *bindu* or seed of creativity from which all form evolves, from the simplest geometric form to the most complex organic systems. Here is the source of primordial cosmic energy, identical to the orgone energy of Dr Wilhelm Reich which he isolated and scientifically verified, the basis of all the natural fields of force in the world and the vehicle of the life-force in the human organism. It is this raw psycho-sexual energy which is taken and transformed by way of an inner alchemy into magical and spiritual power.

Artist and occultist Michael Bertiaux describes this potency of Pluto as "the fundamental magickal energy at the root of sexual radioactivity,"⁵ the energy which fuels the traveler of inner space and the gnostic explorer who seeks illumination in the hidden mysteries. Symbolized by the black dragon in its dormant state, this serpent power is aroused from its sleep at the base of the spine and raised through the subtle energy body to its height in the Crown centre, the Thousand Petalled Lotus above the head to bring "a knowledge of the divine beyond any human concepts."

But always manifesting in opposites there is a shadow side to Pluto, a dark and chaotic realm of primordial power evoked from the depths of the unconscious in such grimoires as the *Necronomicon* given life by H. P. Lovecraft who calls Pluto by the secret name of Yuggoth, ruler of qliphotic and alien nether worlds haunting the void between the stars, a brooding ancient intelligence ever seeking entrance to the human world.

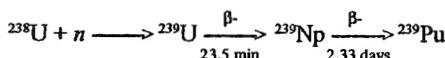
THE "DARK SEED"

There is no metal which traditionally corresponds to Pluto as the Sun does to gold, or silver to the Moon. Although a kinship was shown between the Uranian energies, electricity and radioactivity, and Neptune evoked the invisible ocean of etheric forces which underlies the material world, with Pluto we are dealing with the *source* of all the various energy fields, with the immeasurable qualities of the soul, with evolution, with creation and annihilation.

But if we were to take a substance to *symbolize* the intensely concentrated Plutonian power in its most negative and destructive aspect, we could choose the heaviest element known on Earth which shares its name -- plutonium. The discovery of nuclear fission in the 1930s coincided with

Pluto's discovery, and some 12 years later the silvery metal plutonium was isolated for the first time (it was also the first creation of a synthetic chemical element) marking our entrance into the atomic age and the beginning of a potent transformation of life upon this planet. Scientists had discovered how the structure of an element could be destroyed and, more importantly, the enormous amount of energy released in the process.

Plutonium is not a metal found naturally on earth, except in extremely minute quantities, rather it is a man-made, artificial element created by the neutron bombardment of uranium; the uranium first forms neptunium which is then transformed into plutonium.



Because it is so extremely toxic, plutonium requires special handling. All work is carried out inside 'glove' boxes filled with helium or argon to prevent the plutonium and its alloys from being attacked by moisture and atmospheric gases, and to prevent the workers from ingesting or breathing even the smallest quantity.

Used in nuclear power reactors throughout the world plutonium is a lethal but concentrated fuel where one lb of the substance is said to be equal to 10 million kilowatts of electricity. It is also used to power the fantastically expensive space exploration into the outer regions of the solar system, such as the Voyager expedition, and on the Apollo lunar mission to power seismic and other experimental instruments placed on the Moon's surface.

But the first nuclear reactors were for the military to produce plutonium as an explosive ingredient in nuclear weapons -- it is produced primarily to kill. Atomic scientists and the governments that fund them have discovered Pluto's power to destroy substance and life, but they are powerless to control the consequences.

The greatest danger of plutonium is not only as an explosive but also in its storage and the disposal of its waste. In his book *Atomic Suicide*, Dr Walter Russell describes plutonium as the most deadly of all the radioactive metals. "Its great importance as a killer, lies in the fact that it loses only half of its radioactivity in 23,000 years. Its primal effect upon the human body is in its direct attack upon the bone marrow where human blood corpuscles are formed. Together with strontium, these super calciums could cause more defective skeletal births and agonizing deaths than any plague heretofore known to have hurt mankind."⁶

Radioactivity also attacks the human reproductive cells; the hidden processes of sex and procreation ruled by the zodiacal sign of Scorpio, the fusing of sperm and egg in the body at conception are the very areas most vulnerable to damage. According to a statement from the National Academy of Sciences: "Any radiation which reaches the reproductive cells causes

mutations that are passed on to succeeding generations. There is no minimum amount of radiation which must be exceeded before mutations occur. Any amount, however small, that reaches the reproductive cells can cause a correspondingly small number of mutations. The more radiations, the more mutations. The harm is cumulative. The genetic damage done by radiation builds up as the radiation is received, and depends on the total accumulated gonad dose received by people from their own conception to the conception of their last child."⁶

The danger is not only to human reproduction but to all species, as the matrix of the seed pattern itself is altered, gradually making regeneration impossible and causing widespread sterility in every form of animal and vegetable life.

There is little protection from radioactivity, the silent and invisible killer... "The idea of constructing shields of any material at all for protection against uranium and plutonium is only a temporary expedient." Russell warns. "The time will come when the shields will be as dangerous as the cause. The time element may be long, but when that time comes, the greatest migration history has ever known will take place, and its road will be paved with millions of dead, largely from leukemia which will rapidly increase until it becomes a scourge."⁶

This is the fear of the nuclear shadow under which we live; that life on earth will be destroyed and the world turned into a barren wasteland.

Apart from the mutations caused by radioactivity there is also the deliberate mutation of animal life carried out in the laboratories of biotechnology. Scientists are creating what they call 'transgenic' goats, sheep and cows by injecting their embryos with human genes, in other words cross-breeding human with animal to produce drugs in their milk for experimental medical purposes. This scientifically respectable bestiality echoes the latter days of Atlantean sorcery spoken of in occult tradition, where humans and animals were experimentally mutated into horrendous life forms, precipitating the downfall of that once mighty civilization.

OCCULT PLUTO

"Nuclear power is a frightening symbol of death and decay. It sums up the horror of our times." Michael Jones

There exist two forms of motion in Nature, one that builds up and creates, and the other that breaks down and destroys depending on whether the driving force is centripetal (moving towards the centre) or centrifugal (moving towards the outside). In Nature there is a continuous interplay between these two opposing forces but modern technology, particularly nuclear technology, concentrates on the destructive force of explosion.

Apart from the devastating physical destruction caused by nuclear explosions there is a more subtle and insidious damage inflicted on the invisible etheric web which underlies and sustains the material world. While

based in the desert during his rain making experiments Dr Wilhelm Reich commented on the state of the atmosphere after atomic tests, producing what he called DOR or Deadly Orgone Radiation that filled the desert, seeming to suck the life-force from the atmosphere, the earth and all living beings.

The research of some contemporary occultists has also focussed on the repercussions of nuclear technology on the subtle energy body, the aura of the Earth and the human being.

“Our world is surrounded by a thin atmospheric skin which protects and sustains the balance of life on Earth, but when a breach is made in this protective ionized envelope the delicate balance is destroyed. Nuclear explosions release tremendous pulses of electrical energy from the spaces between the nuclear particles, and as the very fabric of matter is torn asunder these forces rend holes in the protective ionized barrier of our atmosphere... Through this breach internal forces can escape or external forces seeking entry can pour through.”⁷

“Pluto opens the gateway of Chaos,” Grant writes, “the way of reversal to the ‘nightside’ of the Tree of Life.” He goes on to say: “These forces which have been gaining momentum through successive aeons, are pouring astrally from the averse side of the Tree and are threatening to overwhelm human consciousness with the waves of negative vibration that underlie all positive (i.e. phenomenal) existence. It is not therefore surprising that sensitive souls are now recoiling in horror because they have seen -- in the swirling black mirror of the abyss -- the shades massing for an unprecedented influx into the cosmos.”⁸

In this bizarre Plutonian world where art and magic join in their most extreme forms, ancestral memories merge with visions of the future to give fleeting glimpses of strange and alien worlds, transmissions from trans-Plutonian dimensions beyond any human point of reference. Evoking the mythology of primordial powers, of the Ancient Ones who stir restlessly in the depths of pre-human memory, Bertiaux observes: “Dagon will come again, as will mighty sorceries... for the mighty beasts of the deep have been unleashed and they have gone about their pathway of destruction, and far worse is expected...”

Alone the shaman in native traditions descends into the underworld, into the vertiginous qliphotic tunnels of the soul to confront the demons of darkness within, to overcome these monstrous projections and discover the knowledge and power within.

Today there is no need to seek the underworld beyond. Through the forces unleashed by nuclear technology the whole human race has descended into Pluto’s sub-atomic realm, or rather the underworld has risen to meet us, called up by a profane science that worships death over life.

But it is not only in nuclear technology that the death-wish of our civilization lies, although the domed reactor temples are the ultimate symbol of humanity’s insane race towards destruction. We now live in an unreal,

artificial, backwards world, no longer fed and nourished by Nature. Our rivers and lakes are dying, polluted and stagnant, our forests and wilderness are rapidly being destroyed. Our agricultural land poisoned with chemicals and pesticides grows poisoned food for our children to eat, even the oceans have increasing "dead zones," for example, a recent study near Mururoa Atoll in the South Pacific where the French have conducted nuclear tests since 1966, found high concentrations of plutonium in samples of water and marine life.

Once sacrifices were made in return for the precious metals and treasures given in trust to humans by the subterranean gods and spirits. Now they are repaid with underground nuclear blasts which reverberate throughout the planet. Surrounded by the death of Nature, we have become the souls seeking passage through the darkness of Amenta.

But returning to the myth of Pluto, and even our existence will be a myth in some future aeon, we remember Persephone who was abducted to live in the realm of death but who returned to the sunlit world for half the year, to become queen of both worlds. In Pluto all polarities, all extremes are mated; the destruction and creation, the pain and the healing, the Dark Ages and the Ages of Illumination. The influence of Pluto is shown in every birth chart, and any aspects it makes with other planets in the individual horoscope shows where the deepest metamorphosis of consciousness will take place.

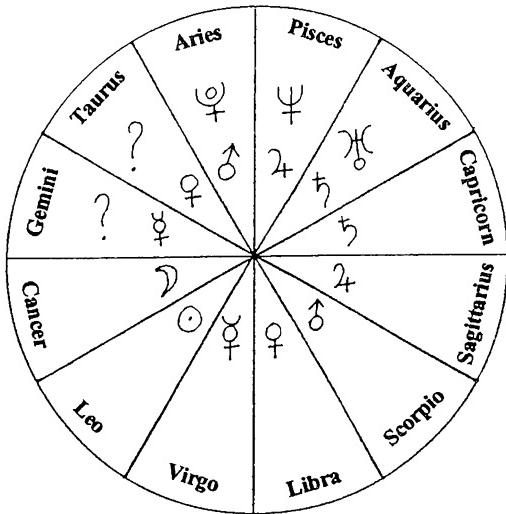
As Stephen Arroyo writes: "In any house, the Plutonian energy can be tapped to make way for an impersonal -- yet controllable -- heightened consciousness and for the will power to direct that awareness into creative activities. As with Saturn, the negative aspect of Pluto has been over-emphasized; for the real power of Pluto only becomes negative if we are seeking to interfere with its work."¹

WHAT LIES BEYOND PLUTO?

*“...hear the mournful sigh of the vortex, the mad rushing of the Ultimate Wind
that Swirls darkly amongst the silent stars.”* The Necronomicon

The search for more distant planets continues. Scientists say that Uranus and Neptune have perturbed orbits which cannot be caused by Pluto and Charon alone, theorizing another giant planet "X" that is yet to be found. Some have imagined a dark companion to the Sun (a hypothetical dark star like the dwarf companion to Sirius) which they call Nemesis, while Soviet astronomers have speculated, from the orbits of groups of comets, that two other planets might be present -- at 5 billion and 9 billion miles from the Sun, with orbits of thousands of years.

They suggest that the orbits of these infinitely distant planets periodically (over millions of years) disturbed comets, some of which collided with the Earth. "A large planetary body moving in an orbit reaching to the Oort cloud of comets, possibly in a highly inclined orbit, would dislodge comets each time the planetary body passed through the aphelion of its orbit."¹⁸

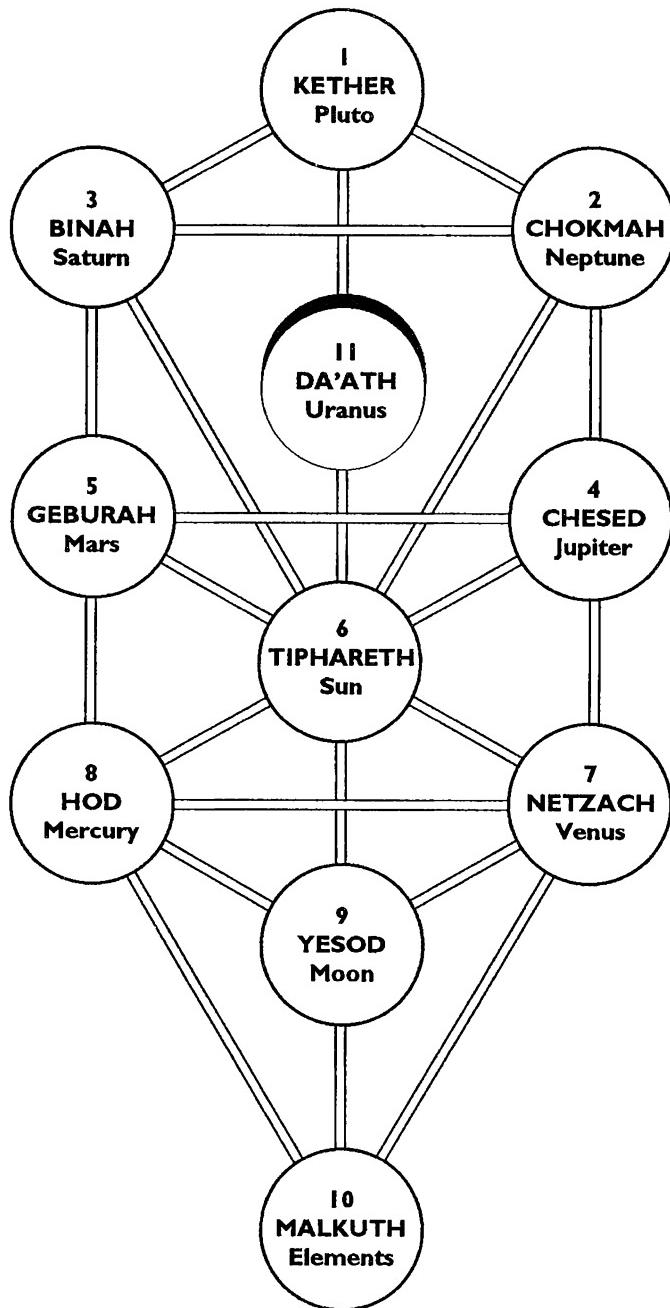


possibly accounting for past cataclysmic events on our planet.

Astrologers have also speculated on the existence of two further planets to complete the zodiacal pattern of 12. In his work, Carl Payne Tobey shows how the discovery of Uranus, Neptune and Pluto logically fits in with this pattern. (see chart above) In this system he assigns the creative energies of Pluto to the fire-sign Aries, to co-rule Scorpio, but two spaces yet remain to be filled.⁹

Zecharia Sitchin also attempts to prove the existence of a 12th planet known to the Sumerians by drawing on ancient Mesopotamian texts, such as one tablet transcribed as meaning “all in all, 12 members where the Moon and Sun belong, where the planets orbit,” and another Sumerian list of 24 celestial bodies that paired the twelve zodiacal constellations with twelve members of the solar system.¹⁰ In occult lore, Grant names this planet, describing Pluto as “the gateway to transplutonic aethyrs (dimensions), symbolized by the planet Isis.”

While the Pioneer and Voyager spacecraft travel deeper into space never to return to Earth, scientists wait in anticipation to find out where the Solar System ends and interstellar space begins, a boundary they refer to as the heliopause. Perhaps they will never know. Such a boundary might not even exist. There are no arbitrary boundaries in inner space, only an infinite unfolding of consciousness.



The Qabalistic Tree of Life

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Acknowledgments

Special thanks to my daughter Tara, to Haroldine, and to Don Hosier, for their support, insight and help during this project.

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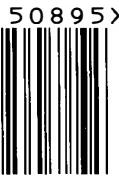
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